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ANNOUNCEMENT OF THE COLLEGE OF ARCHITECTURE 1919-1920

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This announcement is intended to give detailed information to prospective students in the College of Architecture at Cornell University.

For general and detailed information concerning the requirements for admission, tuition and other charges, scholarships and fellowships, cost of living, etc., the General Circular of Information should be consulted. This and the other official publications of the University are listed on the back cover of this pamphlet. Any of the informational publications there mentioned will be sent gratis and post-free upon application to the Secretary of Cornell University, Ithaca, New York.

CALENDAR

First Term 1919-1920

Sept. 19,	Friday,	Entrance examinations begin.
Sept. 24,	Wednesday,	Entrance examinations end.
Sept. 29 & 30,	Monday, Tuesday,	Registration of new students.
Oct. 1,	Wednesday,	Registration of matriculated students.
Oct. 2,	Thursday,	Instruction begins.
Oct. 21,	Tuesday,	Last day for payment of tuition.
Nov. —,	Thursday,	Thanksgiving recess of one day.
Dec. 20,	Saturday,	Instruction ends at 1 P. M. } Christmas Recess.
Jan. 5,	Monday,	Instruction resumed at 1 P. M. }
Jan. 11,	Sunday,	Founder's Day.
Jan. 31,	Saturday,	Instruction ends at 6 P. M.
Feb. 2,	Monday,	Final examinations begin.
Feb. 11,	Wednesday,	Final examinations end.

Second Term 1919-1920

Feb. 14,	Saturday,	Registration of all students.
Feb. 16,	Monday,	Instruction resumed at 8 A. M.
Mar. 5,	Friday,	Last day for payment of tuition.
Mar. 31,	Wednesday,	Instruction ends at 1 P. M. } Spring Recess.
Apr. 6,	Tuesday,	Instruction resumed at 1 P. M. }
May 22,	Saturday,	Navy Day.
June 9,	Wednesday,	Final examinations begin.
June 17,	Thursday,	Final examinations end.
June 23,	Wednesday,	Commencement.

COLLEGE OF ARCHITECTURE

FACULTY

Jacob Gould Schurman, A.M., D.Sc., LL.D., President of the University.
Francke Huntington Bosworth, jr., A.B., Dean of the College of Architecture,
Professor of Design.
Clarence Augustine Martin, D.Sc., Professor of Architecture.
Olaf Martinius Brauner, Professor of Drawing and Painting.
Albert Charles Phelps, B.S., M.Arch., Professor of Architecture and Secretary
of the Faculty of Architecture.
George Young, jr., B.Arch., Professor of Architecture, in the Theory of Construc-
tion.
Christian Midjo, Assistant Professor of Freehand Drawing and Modeling.
LeRoy P. Burnham, B.S.Arch, M.S. Arch., Assistant Professor of Design.
George Ray Chamberlain, M.E., Assistant Professor of Freehand Drawing.
Shepherd Stevens, B.S., A.D.G., Assistant Professor of Design.
Hiram Samuel Gutsell, B.P., A.M., Assistant Professor of Freehand Drawing.
Hubert E. Baxter, B.Arch., Instructor in Architecture. (Absent on leave.)

Marie Elizabeth Waldron, Secretary to the Dean.
Ellen Irene Steele, Librarian.

Students in the College of Architecture receive instruction also from a large corps of professors and instructors in the Colleges of Arts and Sciences, Civil Engineering, Mechanical Engineering, and Agriculture (Department of Landscape Design); and each year men distinguished in architecture or in allied professions are invited to lecture before the College.

PURPOSE OF THE COLLEGE

The purpose of the College is to give the best training possible within the time limits of a college course; to give the fundamentals at least of that broad cultural training universally recognized as essential to the success of men who must meet others of the most varied training and experience, and who must work with them as professional advisers on important problems involving not only questions of personal taste but also business problems of great magnitude; and, at the same time, to give a thorough training in the science and art of an exacting profession which on the one hand touches closely the engineering professions and on the other is itself one of the fine arts.

The usual college course as at present established is of four years' duration. In recent years, however, technical standards and technical efficiency in practice have advanced so rapidly and so far, and the demand for broad education in addition to professional training is becoming so pronounced that a four-year course is no longer adequate to meet the highest demands. It is therefore strongly advised that students plan whenever possible to spend five years or even six, rather than four, in collegiate work, taking not only advanced professional studies but also additional work in the humanities.

ADMISSION AND CLASSIFICATION

Applications for admission to the College of Architecture are entertained from the following classes:

1. Those who desire to begin as freshmen the regular four-year course or the five-year course in architecture, or the four-year construction course.

2. Those who have already attended some technical school or institution of collegiate rank and who desire to enter with advanced standing and to continue their technical studies in the College of Architecture.

3. Those who desire to register as special students not candidates for a degree, to take either the two-year special course as outlined for draftsmen, or to elect work along special lines.

4. Those who desire to take more complete courses—usually six years—leading to the degrees of Bachelor of Architecture and Bachelor of Arts, or Bachelor of Science in Architecture and Civil Engineer.

For admission to the Graduate School, see page 6.

UNIVERSITY ENTRANCE SUBJECTS

The following are the subjects and the maximum and minimum amount of credit in each that may be offered for admission.

A unit means five prepared recitations a week for one year of study, or 120 sixty-minute hours. Two hours of laboratory work is considered equivalent to one hour of prepared recitation. Three hundred hours are required for one unit in drawing or in manual training; 150 hours for one-half unit in drawing.

1a. English No. 1	1½ units	8c. Am. His., Civics . . ½ unit or 1 unit
1b. English No. 2	1½ units	8d. English History . . ½ unit or 1 unit
2a. First Year Greek	1 unit	9a. Elementary Algebra 1 unit
2b. Second Year Greek	1 unit	9b. Intermed. Algebra ½ unit
2c. Third Year Greek	1 unit	9c. Advanced Algebra ½ unit
3a. First Year Latin	1 unit	9d. Plane Geometry 1 unit
3b. Second Year Latin	1 unit	9e. Solid Geometry ½ unit
3c. Third Year Latin	1 unit	9f. Plane Trigonometry ½ unit
3d. Fourth Year Latin	1 unit	9g. Spher. Trigonometry ½ unit
4a. First Year German	1 unit	10. Physics 1 unit
4b. Second Year German	1 unit	11. Chemistry 1 unit
4c. Third Year German	1 unit	12. Phys. Geog. ½ unit or 1 unit
5a. First Year French	1 unit	13. Biology* 1 unit
5b. Second Year French	1 unit	14. Botany* ½ unit or 1 unit
5c. Third Year French	1 unit	14a. Zoology* ½ unit or 1 unit
6a. First Year Spanish	1 unit	15. Bookkeeping ½ unit or 1 unit
6b. Second Year Spanish	1 unit	16. Agriculture ½ unit or 4 units
6c. Third Year Spanish	1 unit	17. Drawing ½ unit or 1 unit
7a. First Year Italian	1 unit	18. Manual Training 1 unit
7b. Second Year Italian	1 unit	19. { Any high school subject
7c. Third Year Italian	1 unit	{ or subjects not already
8a. Ancient Hist. ½ unit or 1 unit		{ used** ½ unit or 1 unit
8b. Mod. Hist. ½ unit or 1 unit		

1. Admission to the Freshman Class in the College of Architecture

All correspondence concerning admission to the Freshman class should be addressed to the Registrar of Cornell University. For admission to the four-year

*If Biology (1 unit) is offered, neither Botany (½ unit) nor Zoology (½ unit) may be counted.

**A student may not count under No. 19 work in subjects Nos. 1-18 until he has offered the maximum (e.g. 4 units of Latin; 3 units of English, Greek, German, French, Italian, or Spanish; 1 unit of Physics, Chemistry, or Manual Training) in Nos. 1-18.

course or to the five-year course in Architecture men must be at least sixteen years of age and women seventeen.

For admission to the four-year courses leading to the degree of Bachelor of Architecture or Bachelor of Science in Architecture the applicant is required to offer fifteen entrance units which must include English 3, †French or †German 3, History 1, Elementary Algebra 1, Intermediate Algebra $\frac{1}{2}$, Advanced Algebra $\frac{1}{2}$, Plane Geometry 1, Solid Geometry $\frac{1}{2}$, Plane Trigonometry $\frac{1}{2}$, and Physics 1. The three remaining units may be chosen from the preceding list of entrance subjects, but the applicant is advised where feasible to offer one unit in chemistry and the other two in language or in history and he may not offer more than one unit in agriculture.

For admission to the five-year courses leading to the degree of Bachelor of Architecture or Bachelor of Science in Architecture the applicant is required to offer fifteen entrance units which must include English 3, any one of the foreign languages listed 3, History 1, Elementary Algebra 1, Plane Geometry 1. The six remaining units may be chosen from the preceding list of entrance subjects, but it is desirable that they conform as closely as feasible to the requirements for admission to the four-year course.

Applicants may be admitted to the freshman class at the beginning of the second term to take a four and a half-year course for the degree of Bachelor of Architecture or Bachelor of Science in Architecture. But any such applicant is required to offer fifteen entrance units which must include all requirements for admission to the five-year course and such additional mathematics and languages as will enable him to complete all other subjects required for admission to the four-year courses during his first term of residence in the University.

2. Admission to Advanced Standing

All correspondence concerning admission to advanced standing should be addressed to the Registrar of Cornell University.

A student who, having already attended some technical school or institution of collegiate rank, desires advanced standing in any regular course in the College of Architecture of Cornell University, should file with the Registrar of Cornell University, on an official blank to be obtained from him, a formal application for admission to advanced standing in the College of Architecture, along with an official certificate from the institution already attended, of his honorable dismissal, his entrance credits in detail, his terms of attendance, and the amount of work that he has completed, with a detailed statement of the courses pursued for which he desires credit at Cornell University. He should also send a catalogue of the institution, writing on it his name and marking the entrance requirements that he has satisfied and each subject that he has completed.

3. Admission as Special Students

All correspondence concerning the admission of special students should be addressed to the Dean of the College of Architecture.

†For the architect, French is more generally useful than German. An applicant with Latin or Greek to offer in place of French or German may be admitted to the five-year course without condition, or he may be admitted to the four-year course on condition that before graduation he make up two units of French or German in Summer Session or outside of the University.

Applicants may, without formal examination, be admitted to the two-year special course in architecture, provided they give satisfactory evidence of ability to do the required work of the course and have neither been previously admitted to the University nor refused as candidates for admission. For admission to this two-year special course, the applicant must be at least twenty-one years of age; he must have had a good high school training or its equivalent, including particularly a good working knowledge of plane geometry and of algebra through quadratic equations; and should be familiar with the details and proportions of the classic orders of architecture. He shall have had at least three years' experience in some good architect's office, or its equivalent, and shall submit with his application examples of his draftsmanship. Architectural drawings in particular are required, but it is to the applicant's advantage to submit any additional work that would tend to show his artistic ability or skill as a draftsman. The application should be accompanied by a certificate that the drawings submitted are the work of the applicant.

4. Six-Year Courses Leading to the Degrees of Bachelor of Architecture and Bachelor of Arts, or Bachelor of Science in Architecture and Civil Engineer

A student in the College of Arts and Sciences who has satisfied at least six terms of residence, and who has credit for at least ninety hours, may with the permission of the faculties concerned be registered both in the College of Arts and Sciences and in the College of Architecture. This provision enables a student, who so desires, to obtain the degree of Bachelor of Arts at the end of four years, and the degree of Bachelor of Architecture at the end of six years.

By special arrangement between the colleges concerned, a student may in six years secure the degree of Bachelor of Science in Architecture and the degree of Civil Engineer.

Admission as Graduate Students

All correspondence relating to graduate work should be addressed to the Dean of the Graduate School.

In all departments of the College of Architecture work is arranged to meet the special needs of graduate students. Candidates for advanced degrees in architecture must be graduates of schools of equal standing with the College of Architecture, and their training in design or other subjects elected for graduate study must be equivalent to the training required in the same subjects by this College for the degree of Bachelor of Architecture.

Office Work and Building Experience

It is an indisputable fact that, other things being equal, men who have had practical experience either in architecture or in building are the ones who derive the greatest benefit from their work in the College of Architecture. For this reason students are urged to spend their summer vacations, so far as possible, as assistants in good offices, or on actual building operations.

Scholarships, Prizes, Etc.

For detailed information concerning State scholarships and University undergraduate scholarships, which are open to students in architecture in common with other students in the University, see the General Circular of Information, pages 35 to 39.

A University fellowship of the value of \$400 with free tuition is awarded annually to a graduate student in architecture.

The Sands Memorial Medal is awarded for special excellence in design attained in individual problems at any time.

The Brown Memorial Medal is awarded each year to the two members of the graduating class who have made the best record in Design in their senior year.

The student medal of the American Institute of Architects is awarded to the member of the graduating class whose record is the best throughout the entire course, and the person to whom the medal is awarded is invited to exhibit his work at the next annual convention of the Institute.

The French Société des Architectes diplômés par le Gouvernement, of Paris, offers each year two medals to be awarded by the faculty to the two students in the college whom the faculty may choose as worthy of the distinction.

Through the Beaux-Arts Institute of Design numerous prizes are offered for excellence of work in design. These prizes are open to students in the College of Architecture who frequently compete for them with success and distinction to themselves and to the College.

The Fuertes Memorial Prizes in Oratory, first prize \$100 and second prize \$20, are open to students in architecture on equal terms with students in engineering.

Other prizes, sometimes of considerable value, are frequently offered to students by friends of the College for excellence in special lines of work.

Graduates of the College of Architecture are admitted without examination to the competition for scholarships in the American Academy in Rome, and to the Paris Prize competition of the Beaux-Arts Institute of Design. These scholarships are awarded annually and each of them provides for two or more years of study in Europe with an annual stipend of \$1000 and other material advantages.

Graduates of the College are excused from the usual examinations, except those relating to practical experience, required for admission to the American Institute of Architects and for license in those states where a license or registration is required for the practice of architecture.

REGULAR FOUR-YEAR COURSE LEADING TO THE DEGREE OF BACHELOR OF ARCHITECTURE

Freshman Year

	1st Term	2d Term
*Theory of Architecture	1	—
Architectural Design.....	3	2
Theory of Construction.....	3	3
Freehand	4	4
History of Architecture.....	—	3
*Graphics	3	2
*English	—	3

Sophomore Year

	1st Term	2d Term
*Theory of Architecture.....	1	—
Architectural Design.....	6	6
Theory of Construction.....	2	3
Freehand	2	4
History of Architecture.....	3	2
*Graphics	1	—
*Applied Construction.....	2	2

Physical Training, three hours a week, is required of all regular freshmen and sophomores. The men take this work as military drill in the Department of Military Science and Tactics. The women take the work in the Department of Physical Culture.

Junior Year

	1st Term	2d Term
Architectural Design.....	6	6
Theory of Construction.....	3	5
Freehand	2	—
History of Architecture.....	1	1
*Applied Construction.....	2	2
Electives	3	4

Senior Year

	1st Term	2d Term
Architectural Design and Thesis.....	10	10
Theory of Construction.....	3	5
History of Architecture.....	—	2
Electives	4	—

Regular curriculum as revised September 16, 1919

*New course.

FOUR-YEAR CONSTRUCTION COURSE LEADING TO THE DEGREE OF
BACHELOR OF SCIENCE IN ARCHITECTURE

Freshman Year	No. of Course	1st Term	2d Term
Analytical Geometry and Calculus.....	5	5	5
Descriptive Geometry.....	9	3	—
History of Architecture.....	10	3	3
Elements of Architecture.....	11	3	3
Freehand Drawing.....	12	3	3
Shades and Shadows.....	13	—	2
Masonry Construction.....	15	—	2
Summer Reading (See page 16).....			

Sophomore Year	No. of Course	1st Term	2d Term
Design	21	8	8
Perspective	24	—	1
Mechanics (C.E.).....	20	5	—
Mechanics (C.E.).....	21	—	5
Physics	2	5	—
Heating, Plumbing, and Lighting.....	36	—	2
Elective	—	—	2
Summer Reading (See page 16).....			

Physical Training, three hours a week, is required of all regular freshmen and sophomores. The men take this work as military drill in the Department of Military Science and Tactics. The women take the work in the Department of Physical Culture.

Junior Year	No. of Course	1st Term	2d Term
History of Architecture.....	20	3	—
Design	31	8	—
Carpentry and Specifications.....	34a	2	—
Bridges (C. E.).....	71	4	4
Materials Laboratory (C. E.).....	22	—	2
Materials of Construction (C. E.).....	25	—	3
Concrete Construction (C. E.).....	77	—	3
Modern Architecture.....	40	—	2
Oral Expression.....	29	—	3

Senior Year	No. of Course	1st Term	2d Term
Antique, Water Color, or Modeling.....		2	—
Fire-Resisting Construction.....	33	1	—
City Planning.....	44	1	—
Steel Buildings (C. E.).....	76	—	3
Concrete Design (C. E.).....	78	—	3

In addition to the above not less than 23 hours, from courses in Engineering, Architecture, and Economics or kindred subjects, the election in all cases to be subject to faculty approval.

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COLLEGE OF ARCHITECTURE

THE FIVE-YEAR COURSES LEADING TO THE DEGREE OF BACHELOR OF ARCHITECTURE OR BACHELOR OF SCIENCE IN ARCHITECTURE

Since considerable latitude is allowed in choice of entrance subjects offered for admission to these courses, the first two years must be varied accordingly. The following outline is given as the basis upon which the courses will be formulated.

First Year			
Courses required if not offered for entrance			
	No. of Course	1st Term	2d Term
*French	1	6	or 6
English	1 or 3	4	4
Solid Geometry	1	3	or 3
Advanced Algebra	2	5	or 5
or			
Advanced Algebra	2(E)	3	
Plane trigonometry	3	3	or 3
Physics	2	5	or 5

Courses especially recommended for election			
	No. of Course	1st Term	2d Term
*Chemistry	1	6	or 6
History of Architecture.....	10	3	3
Freehand Drawing.....	12	3	3

Other subjects from which election is advised are: German, Spanish, History, Psychology, Geology, Music.

Second Year

This should comprise all of the first year of the four-year course not already taken, with electives to make a full schedule. These electives may be chosen somewhat freely but subject to faculty approval. In general the student is advised to elect non-professional subjects such as language, economics, etc.

Third, Fourth, and Fifth Years

The prescribed work for these years will be the same as the last three years of the regular four-year course or the four-year construction course.

TWO-YEAR SPECIAL COURSE IN ARCHITECTURE

This course does not lead to a degree, but a certificate will be issued upon its satisfactory completion. Where students are prepared to do advanced work the course will be arranged, within the limits of the curriculum, to meet special cases.

First Year			
	No. of Course	1st Term	2d Term
History of Architecture.....	10	3	3
Design	21	8	8
Freehand Drawing.....	12	3	3
Descriptive Geometry.....	9	3	—
Shades and Shadows.....	13	—	2
Perspective	24	—	1
Water Color Painting.....	14	—	2

*Students entering the construction course ar required to take Chemistry, but will not be required to take French.

	Second Year	No. of Course	1st Term	2d Term
History of Architecture.....		20	3	—
Design		41	10	8
Design		41a	—	4
Drawing from the Antique.....		22	1	—
Advanced Water Color Painting.....		23	2	—
Modeling in Clay.....		26	—	2
Modern Architecture.....		40	—	2

THE SIX-YEAR COURSE LEADING TO THE DEGREES OF BACHELOR OF ARTS AND BACHELOR OF ARCHITECTURE

This course assumes that the candidate will be registered in the College of Arts and Sciences alone in the first three years of this course and take such work in Architecture as will enable him to complete all of the first year of technical work by the end of his third year. In his fourth year he will register both in the College of Arts and Sciences and in the College of Architecture, taking regular second year work in Architecture and at the same time being a candidate for the degree of Bachelor of Arts which will normally be conferred at the end of the fourth year. For the remainder of his course he will be registered in the College of Architecture alone and will normally receive the degree of Bachelor of Architecture at the end of his sixth year in the University. The following outline is intended to indicate particularly the sequence and amount of work to be taken in Architecture.

First Year

The required work for the first year includes freehand drawing 4 hours, foreign language 6 hours, English or history (separately or together) 6 hours, mathematics or philosophy 6 hours, science 6 hours, and such further work as the College of Arts and Sciences may prescribe.

Second Year

The required work for the second year includes History of Architecture 6 hours, freehand drawing 2 hours, water color painting 2 hours, and such further work as the College of Arts and Sciences may prescribe.

Third Year

The required work for the third year includes descriptive geometry 3 hours, elements of architecture 6 hours, shades and shadows 2 hours, analytic geometry and calculus 6 hours, building stones and clay products 2 hours, and such further work as the College of Arts and Sciences may prescribe.

Fourth, Fifth, and Sixth Years

The work of the last three years of the course will be the same as the last three years of the regular four-year course in architecture or of the four-year construction course in architecture.

COURSES OF INSTRUCTION

1a. **Elementary Freehand Drawing.** Throughout the year, credit two hours a term. Assistant Professor CHAMBERLAIN and Assistant Professor GUTSELL. M W, M F, or W F, 2-5, Franklin Hall.

1b. **Elementary Freehand Drawing.** Throughout the year, credit three hours a term. Assistant Professor CHAMBERLAIN and Assistant Professor GUTSELL. M W F, 2-5, Franklin Hall.

2a. **Advanced Freehand Drawing.** Throughout the year, credit two hours a term. Prerequisite course 1b or its equivalent. Assistant Professor CHAMBERLAIN and Assistant Professor GUTSELL. M W, M F, or W F, 2-5, Franklin Hall.

2b. **Advanced Freehand Drawing.** Throughout the year, credit three hours a term. Prerequisite course 1b or its equivalent. Assistant Professor CHAMBERLAIN and Assistant Professor GUTSELL. M W F, 2-5, Franklin Hall.

Note—The above courses in drawing are open to all students in the University under such conditions as their respective faculties may prescribe.

8. **Analytic Geometry and Calculus.** Throughout the year, credit three hours a term. Given in the College of Arts and Sciences. White Hall. Section 1, M W F, at 8; section 2, T Th S, at 8.

9. **Descriptive Geometry.** First term, credit three hours. Prerequisite Solid Geometry. Professor YOUNG and Mr. ———. Franklin Hall. The fundamental principles of descriptive geometry are studied and applied to the solution of problems in projection. Lectures and drawing nine hours a week.

10. **History of Architecture.** Throughout the year, credit three hours a term. Professor PHELPS. White Hall 33. First term: Egyptian, Greek, Roman, and Byzantine architecture. Second term: Romanesque and Gothic architecture. Lectures with assigned readings, sketches, and examinations.

11. **Elements of Architecture.** Throughout the year, credit three hours each term. The second term must follow or be taken with Shades and Shadows. Assistant Professor ———. White Hall. The classic orders of architecture and elementary studies in composition, with drawings rendered in india ink and in water color. Nine hours a week.

12. **Freehand Drawing.** Throughout the year, credit three hours a term. Assistant Professor CHAMBERLAIN. Franklin Hall. Pencil and charcoal drawing from the cast, and freehand perspective. Nine hours a week.

13. **Shades and Shadows.** Second term, credit two hours. This course must follow or be accompanied by descriptive geometry. Professor MARTIN. White Hall. Lectures and drawing.

14. **Water Color Painting.** Second term, credit two hours. Prerequisite course 12. Assistant Professor MIDJO. Franklin Hall. Painting from still life groups, and out-door sketching. Six hours a week.

15. Masonry Construction. Second term, credit two hours. Professor MARTIN. White Hall. Lectures and reading, supplemented by drawing and by inspection of actual work.

20. History of Architecture. First term, credit three hours. Prerequisite course 10. Professor PHELPS. White Hall 33. Architecture of the Renaissance and to the beginning of the nineteenth century in the principal European countries. Lectures with assigned readings, sketches, and examinations.

21. Design. Throughout the year, credit eight hours a term. Prerequisite courses 11 and 13. Assistant Professor STEVENS. White Hall. A series of problems in architectural design, composition, planning, studies in detail, rendering, etc., requiring about twenty-four hours a week.

21a. Interior Decoration. Throughout the year, credit four hours a term. Prerequisite course 21 or its equivalent. Assistant Professor STEVENS. White Hall. A series of lectures and problems in interior design and decoration, composition, studies in detail, rendering, etc., requiring about twelve hours a week. The purpose of the course is to study the architectural styles most in vogue in modern buildings with special reference to interior design, not as studies in archaeology but as American adaptations of historical styles. Problems will be carried out in Italian Renaissance, the later French styles (Louis XIV, XV, and XVI), the various English styles (Tudor, William and Mary, Adam), and the Georgian period in America.

22. Drawing from the Antique. Throughout the year, credit one hour first term and two hours second term. Prerequisite course 12. Professor BRAUNER and Assistant Professor MIDJO. Franklin Hall. Work from the cast in charcoal and pastel. Three hours a week drawing for each hour credit (see course 23).

23. Advanced Water Color Painting. First term, credit two hours. Prerequisite course 14. Assistant Professor MIDJO. Franklin Hall. This course is given in conjunction with course 22 and will require nine hours a week for two-thirds of the term, while course 22 will require nine hours a week for one-third of the term. Given with special reference to architectural rendering.

24. Perspective. Second term, credit one hour. Prerequisite courses 9 and 11. Professor MARTIN. White Hall. Lectures and drawing.

25. Historic Ornament. Second term, credit two hours. Prerequisite courses 10 and 20. Professor PHELPS. White Hall 33. Some of the great historic styles of decoration will be analyzed and studied in detail, and the development of furniture, stained glass, and other minor arts will be briefly outlined. Lectures and examinations.

26. Modeling. Second term, credit two hours. Assistant Professor GUTSELL. Franklin Hall. Six hours a week modeling in clay from relief ornament and sculpture, and modeling original designs in relief and in the round.

27. Mechanics. Second term, credit two hours. Prerequisite Mathematics No. 8. Professor YOUNG. A brief study of the principles of analytic and graphic statics with reference to their application in course 35. Recitations.

28. **Stereotomy.** First term, credit one hour. Prerequisite course 9. Professor MARTIN. Advanced projective drawing given with special reference to the proper working out of the more complex architectural constructions, such as stone vaulting, stone stairs, etc.

29. **Oral Expression.** First term, credit three hours. Given in the College of Arts and Sciences by Professor WINANS. While other forms of address will not be ignored, the emphasis in this course will be upon training for the clear and convincing interpretation of drawings or plans for important projects as they might be presented before building committees, city councils, civic societies, etc. Problems for discussion will be taken from the daily work of the students.

30. (A. and S.) **Building Stones and Clay Products.** First term, credit two hours. Given in the College of Arts and Sciences by Professor RIES and Mr. ———. Lectures, T, 9. Laboratory either W or F, 2-4.30. McGraw Hall. The occurrence, distribution, and uses of building stones, and the use of clay for structural products.

30. **History of Painting and Sculpture.** Throughout the year, credit one hour a term. Professor PHELPS. White Hall 33. A brief survey of the history of Greek sculpture and of Italian painting.

30a. **History of Art.** Throughout the year, credit two hours a term. Assistant Professor GUTSELL. White Hall 33. The condition of the arts on the decline of Roman Civilization. The revival of the arts of design in the thirteenth century. The development of painting and sculpture in Italy until the sixteenth century and a brief review of their decline. Registration in the second term is open to students not having the first term, provided they have credit for course 30 or Arts and Sciences, History 11 or 12, or Philosophy 4. Given in 1919-1920 and in alternate years following.

30b-1. **History of Art.** First term, credit two hours. Assistant Professor GUTSELL. White Hall 33. Painting and the reproductive arts in the north of Italy until the reformation. Given in 1918-1919, and alternate years following.

30b-2. **History of Art.** Second term, credit two hours. Assistant Professor GUTSELL. White Hall 33. Painting in the sixteenth and seventeenth centuries in Flanders and Holland. Given in 1918-1919 and alternate years following.

31. **Design.** First term, credit eight hours. Prerequisite course 21. Assistant Professor BURNHAM. White Hall. This course continues the work of course 21 with more advanced problems in Architectural design. About 24 hours a week during the first half of the term.

31a. **Design.** Second term, credit six hours. Prerequisite courses 21 and 31. Assistant Professor BURNHAM. White Hall. This course continues the work of courses 21 and 31 with more advanced problems in architectural design, composition, and planning. About 30 hours a week during the first ten weeks of the term (see course 34b).

32. **Drawing from the Antique.** First term, credit two hours. Prerequisite course 22. Professor BRAUNER and Assistant Professor MIDJO. Franklin Hall. The work consists of drawing from antique sculpture and from life. Six hours a week.

33. Fire Resisting Construction. First term, credit one hour. Professor MARTIN. White Hall 33. A study of fire prevention and fire protection in the design, construction, and equipment of buildings. Lectures and reading.

34a. Carpentry and Specifications. First term, credit two hours. Professor MARTIN. White Hall 33. Lectures and reading.

34b. Working Drawings. Second term, credit four hours. Prerequisite courses 21 and 31. Assistant Professor BURNHAM. White Hall. This course follows course 31a in the same term and takes up the development of ordinary scale working drawings and details of construction, preferably for a building originally designed in course 31a. About 30 hours a week during the last six weeks of the term.

35. Strength of Materials. First term, credit two hours. Prerequisite course 27. Professor YOUNG and Mr. ———. Franklin Hall. A brief study of the effects of loading in producing stress and deformation. The class room work is supplemented by problems relating to beams, columns, masonry, and very briefly to reinforced concrete. Recitations and lectures.

35a. Graphic Statics. First term, credit one hour. Prerequisite course 27 and must follow or be taken with course 35. Professor YOUNG and Mr. ———. Franklin Hall. The study of graphic statics is continued from course 27 and applied to the solution of problems on a larger scale. Drafting.

35b. Structural Design. Second term, credit five hours. Prerequisite courses 27, 35 and 35a. Professor YOUNG and Mr. ———. Franklin Hall. The principles studied in courses 27, 35 and 35a are applied to the structural design of typical architectural problems. Lectures and reports.

36. Heating, Plumbing, and Lighting. Second term, credit two hours. Professor MARTIN. White Hall 33. A brief study of the principles of heating, ventilation, plumbing, and lighting. Lectures and exercises.

40. Modern Architecture. Second term, credit two hours. Prerequisite courses 10 and 20. Professor PHELPS. White Hall 33. Nineteenth century architecture in the principal European countries, and colonial and more recent work in the United States.

41. Design. Throughout the year, credit ten hours first term, and eight hours second term. Prerequisite courses 21 and 31. Professor BOSWORTH and Assistant Professor BURNHAM. White Hall. This course is a continuation of courses 21, 31, and 31a with advanced problems in architectural design, composition, planning, etc. Three hours a week for each credit hour.

41a. Design. Second term, credit four hours. Professor BOSWORTH and Assistant Professor BURNHAM. White Hall. Prerequisite course 41. A continuation of course 41 consisting of a single major problem studied and worked up in detail as a thesis problem.

42. Life Class. Throughout the year, credit three hours first term and two hours second term. First term required, second term elective. Professor BRAUNER. Franklin Hall. Drawing from the nude model. Three hours a week for each hour of credit.

43. **Historical Seminary.** Throughout the year, credit one hour a term. Prerequisite courses 10 and 20. Professor PHELPS. White Hall. Investigation of assigned topics in the history of architecture; review of books, abstracts and discussions of current periodical literature.

44. **City Planning.** First term, credit one hour. This is not a technical course confined to the architectural aspect of city planning, but is designed to give a broad survey of the general problems—social, economic, and physical—to be considered in planning for the improvement of towns and cities. Lectures by nonresidents and by members of the University Faculty. It is advised that course 57b in Citizenship, given in the department of Political Science, two hours, second term, be elected to supplement the work of this course.

Summer Reading. In addition to the regular studies of the freshman and sophomore years the students are required to read, during the summer recess, books of their own selection from grouped lists. The book lists are prepared and one or more introductory lectures given each year, just before the summer vacation, by one of the Professors in the Department of English in the College of Arts and Sciences.

Courses in Engineering. In the Four-year Construction Course the following subjects not herein described are indicated either as required or as elective: Mechanics 20 and 21, Bridges 71, Materials Laboratory 22, Materials of Construction 25, Concrete Construction 77, Concrete Design 78, Steel Buildings 76, Testing Materials 27, Higher Structures 73, Masonry Foundations 74, Reinforced Concrete 72, Cost Keeping and Management 89, Specifications and Contracts 90, Engineering Design 91f, Engineering Problems 29, Hydraulics 40, and Municipal Sanitation 52. These subjects are given in the College of Civil Engineering and are described in detail in the Announcement of the College of Civil Engineering which may be had upon application to the Secretary of Cornell University, Ithaca, New York.

BUILDINGS, EQUIPMENT, ETC.

The College of Architecture occupies the entire third and fourth floors of White Hall and the top floor and a part of the second floor of Franklin Hall, which is next to White. The college offices, the college library, and lecture and exhibition rooms occupy the third floor of White; a suite of three drafting rooms occupies the whole of the fourth floor. On the top floor of Franklin are studios devoted to the work of the life class, freehand drawing, modeling, still life painting, etc.

The three drafting rooms on the fourth floor of White Hall open together so as to form virtually a single great room, approximately 156 feet long and 40 feet wide. Although they make no pretense to architectural beauty, having been designed for other use a half-century ago, these rooms are airy and comfortable, and they are thoroughly well lighted for either day or night work. The drafting rooms are open from 8 A. M. to 10.30 P. M., and every student of the college has his place in one of them—a place which is assigned to him alone and where he can work freely during any hours of the day that he chooses. By this union of three drafting rooms in one, the whole college, from graduate student to freshman, is brought together during a large part of every working day. This contact with

older and more advanced students has a stimulating and wholesome effect upon the younger men.

The college library, which includes a selection of reference books, is one of the most comprehensive of its kind. The shelves and cases hold a large collection of books useful in the study of architecture, several thousand photographs, and more than 11,000 lantern slides. Current numbers of more than thirty technical periodicals are on file in the reading room. The library is near the drafting rooms and students are free to go to the shelves and select books or photographs which they may then take to the drafting rooms—a privilege that adds immeasurably to the value of their work. For reference and inspiration in the technique of drawing or of rendering in architectural design, the college has a fine collection of rendered drawings made by recognized masters of the art, and a large and growing collection of drawings selected from the work of its former students.

The entire upper floor of Franklin Hall, about seven thousand five hundred square feet of floor space, is devoted to the work in free-hand drawing, life class, modeling, still life painting, etc. The studios here are lighted from the north through large mansard skylights that give an abundance of steady even light throughout the day, and here again the students work together in the same spirit of freedom and friendly competition that characterizes the work in design and that sets a standard not obtainable in any other way. The equipment for this work is of the best and consists in the main of a very large and complete collection of casts from the best periods of the sculptor's art, and an excellent collection of pottery, faience, textiles, etc.

One of the most stimulating elements in the scheme of instruction is the maintenance throughout the year of a practically continuous series of exhibitions in the two large exhibition rooms in White Hall. Here the work of every student in design must go on public exhibition as soon as a problem is completed and must remain on exhibition until the space is required for the next series of problems. Thus each student may, in addition to his personal experience, gain the largest possible measure of profit from the success or failure of his fellows. As a means of keeping the students in touch with kindred interests in the world at large, several special exhibitions are held each year, varying in scope and character, but consisting usually of drawings from the offices of distinguished architects, drawings from other schools of architecture, sketches, paintings, etc.

In any profession involving so much of sentiment and feeling as does architecture, spirit and environment are important influences. The student must begin with at least a certain amount of enthusiasm, breadth of view, and an innate feeling for the beautiful. Given these qualities it remains for the college to supply as far as it may the intellectual, moral, and esthetic training requisite for the practice of architecture. This it does partly by means of the equipment already described, but mainly through the quality and character of the instruction. Throughout the course, the instruction is personal elbow-to-elbow work that calls forth the best there is in both instructor and pupil. The aim is always to develop the personality of the pupil, to make of him a creative artist, master of his own powers, rather than merely a clever draftsman reproducing the ideas of one greater than himself. Add to this the fact that the natural environment of the University, with its hills, gorges, and lake, is one of the most beautiful anywhere in the world, and conditions for wholesome, inspiring development are well nigh ideal.



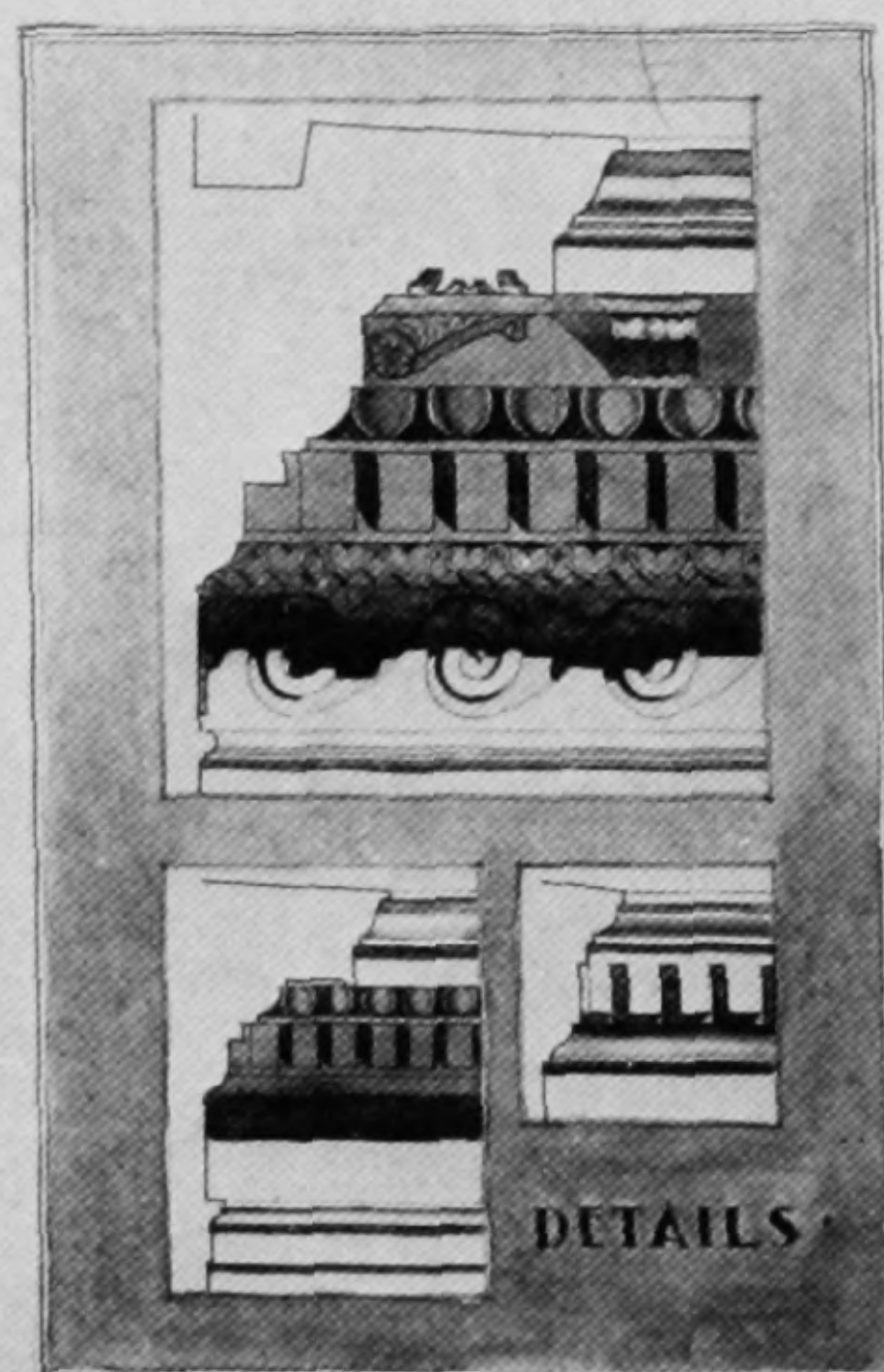
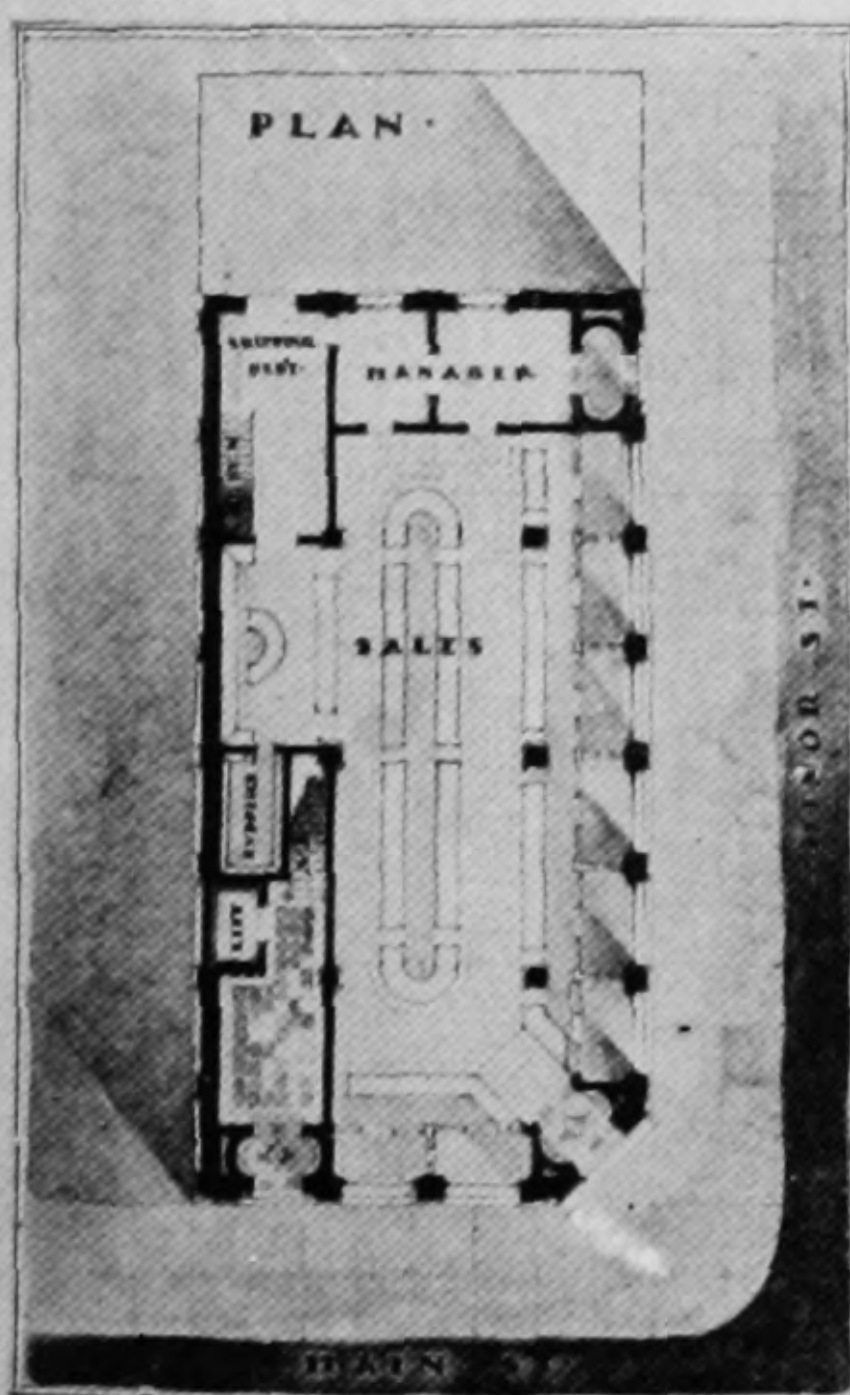
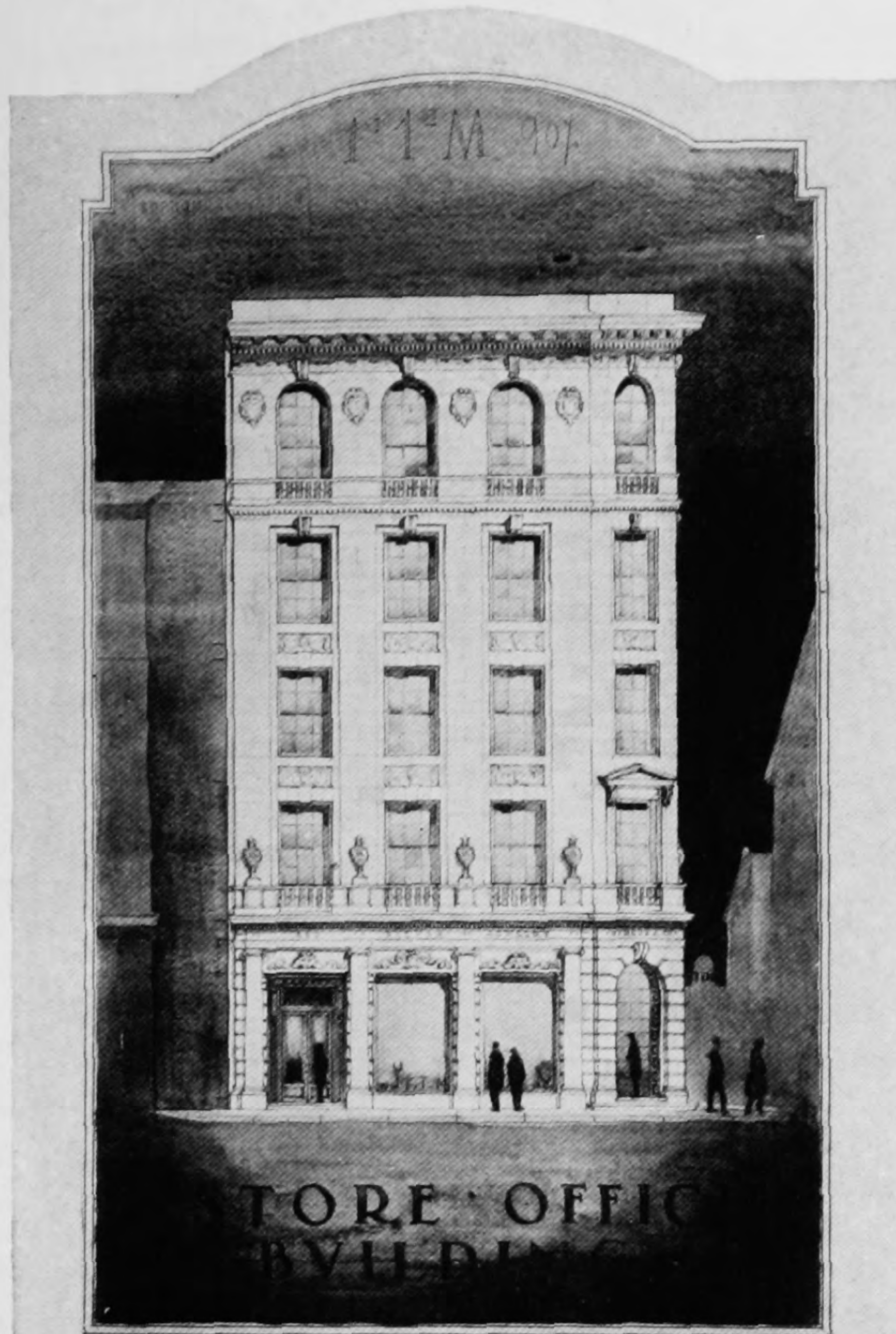
A PART OF THE FREEHAND DRAWING STUDIO





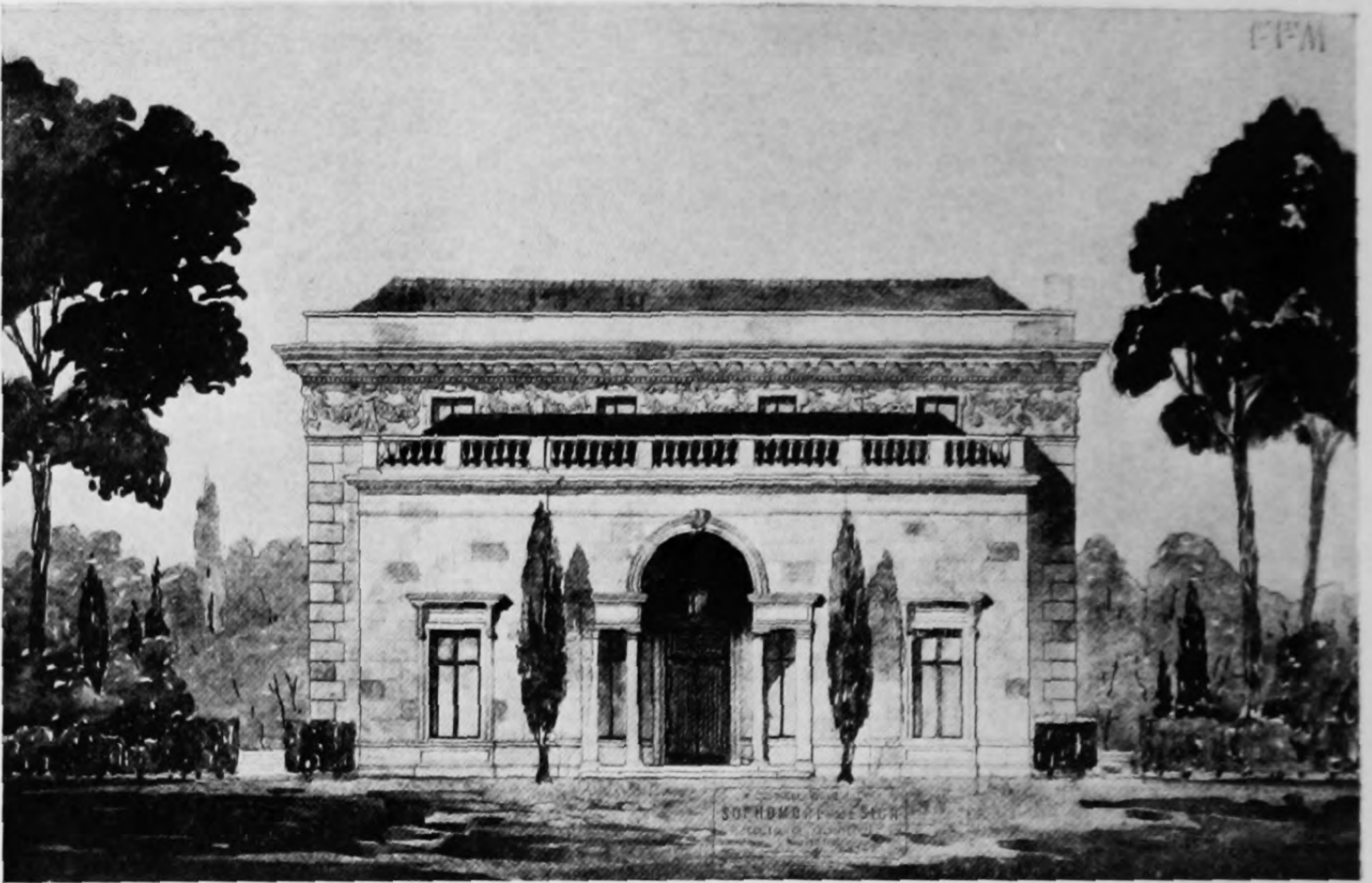
FRESHMAN DESIGN

Miss P. C. Ogden



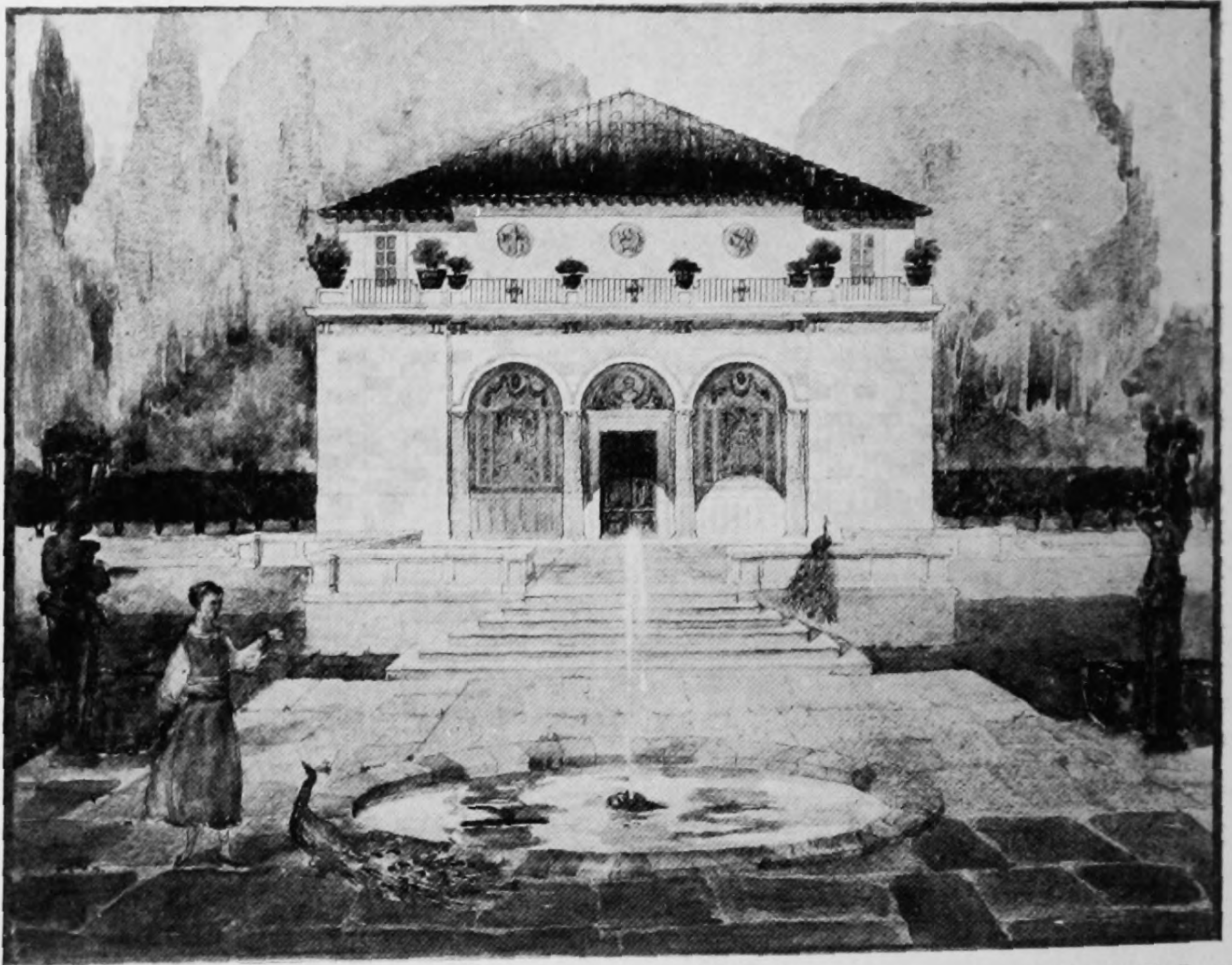
R. D. McPherson

SOPHOMORE DESIGN—A STORE AND OFFICE BUILDING



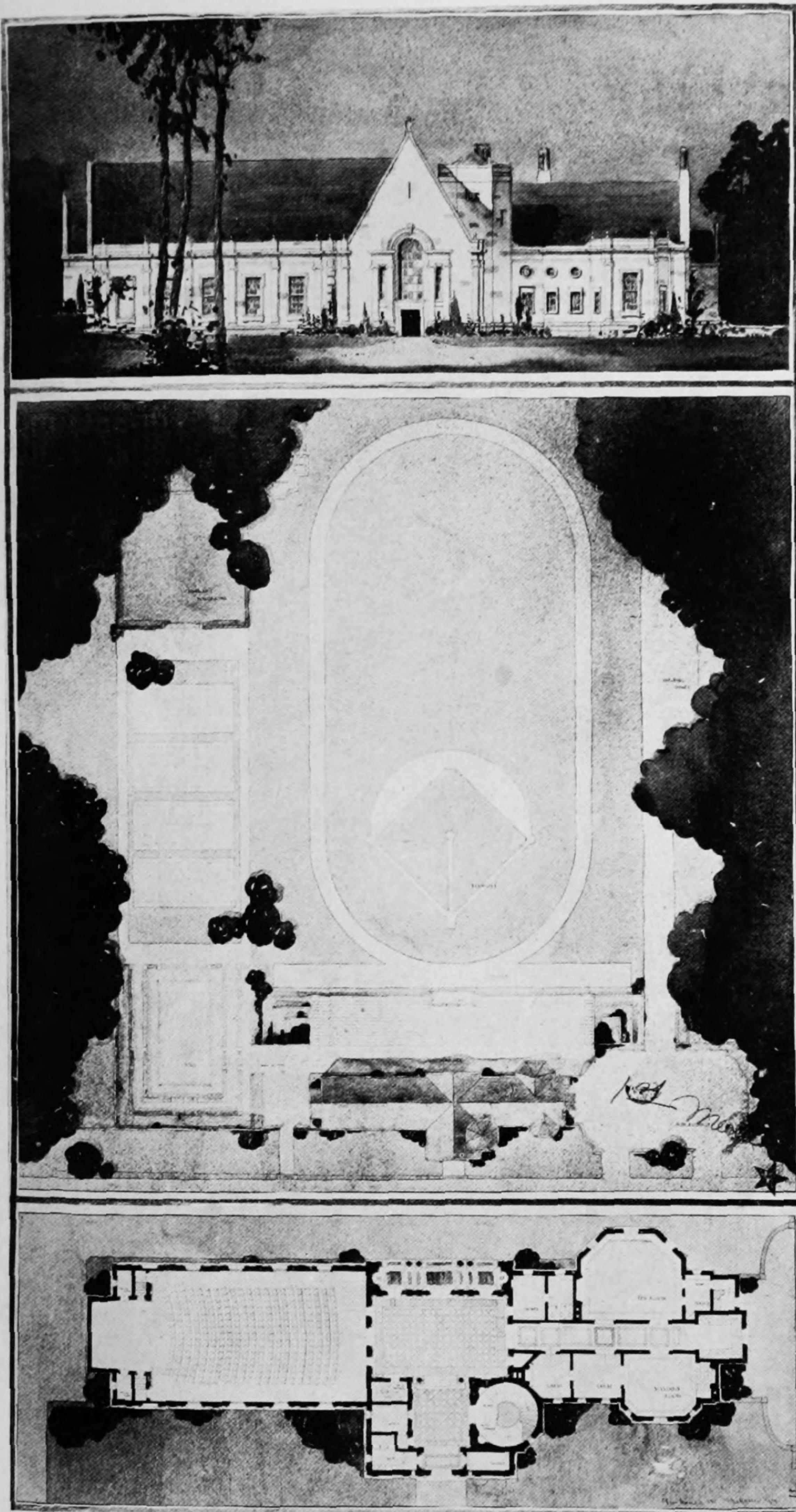
E. B. Mason

A STUDIO BUILDING



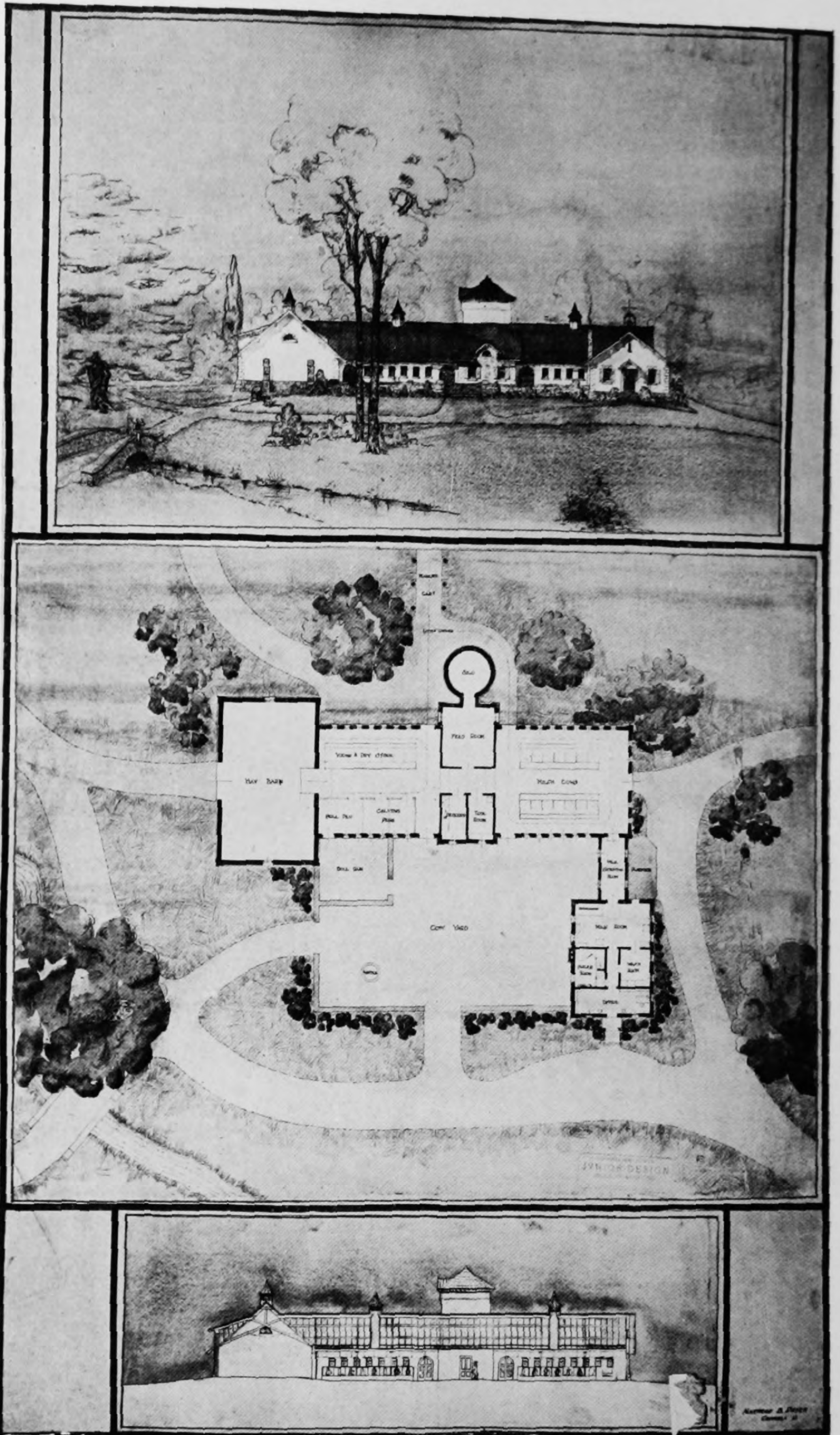
Miss D. F. Levy

A CONCERT HALL IN A GARDEN
SOPHOMORE DESIGN



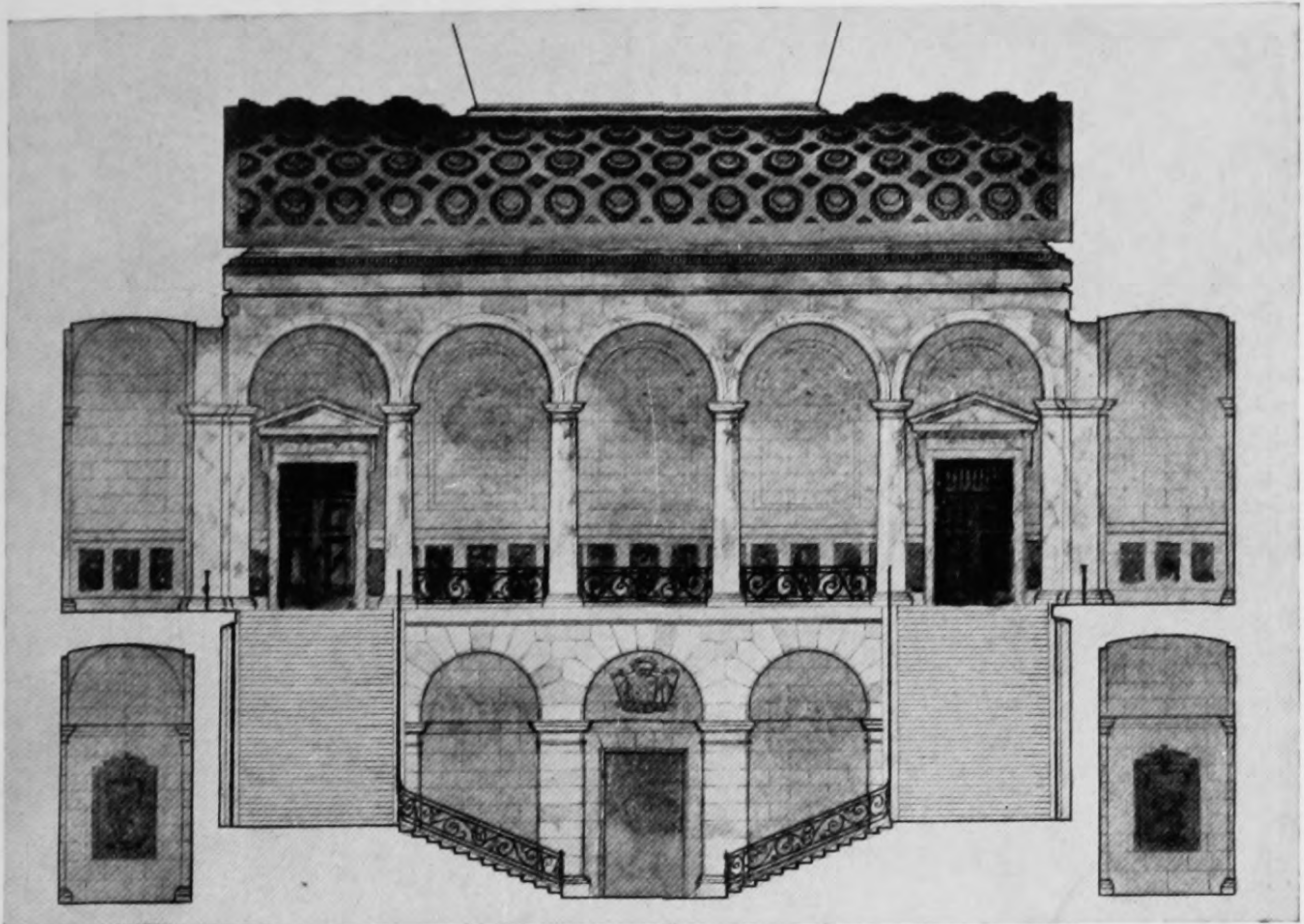
F. R. Steffens

JUNIOR DESIGN—AN ATHLETIC CENTER FOR AN INDUSTRIAL TOWN

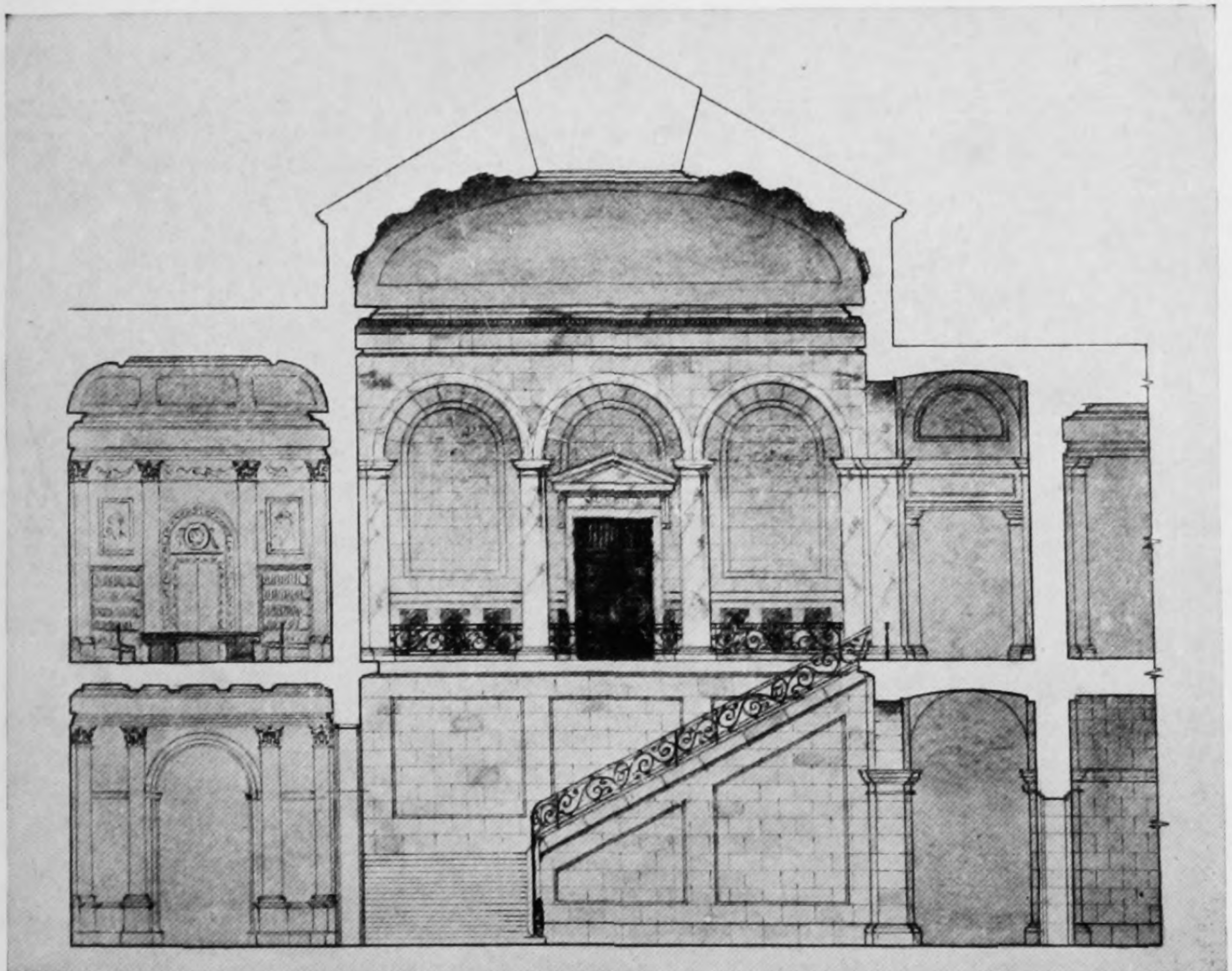


H. B. Dryer

JUNIOR DESIGN—A DAIRY FARM

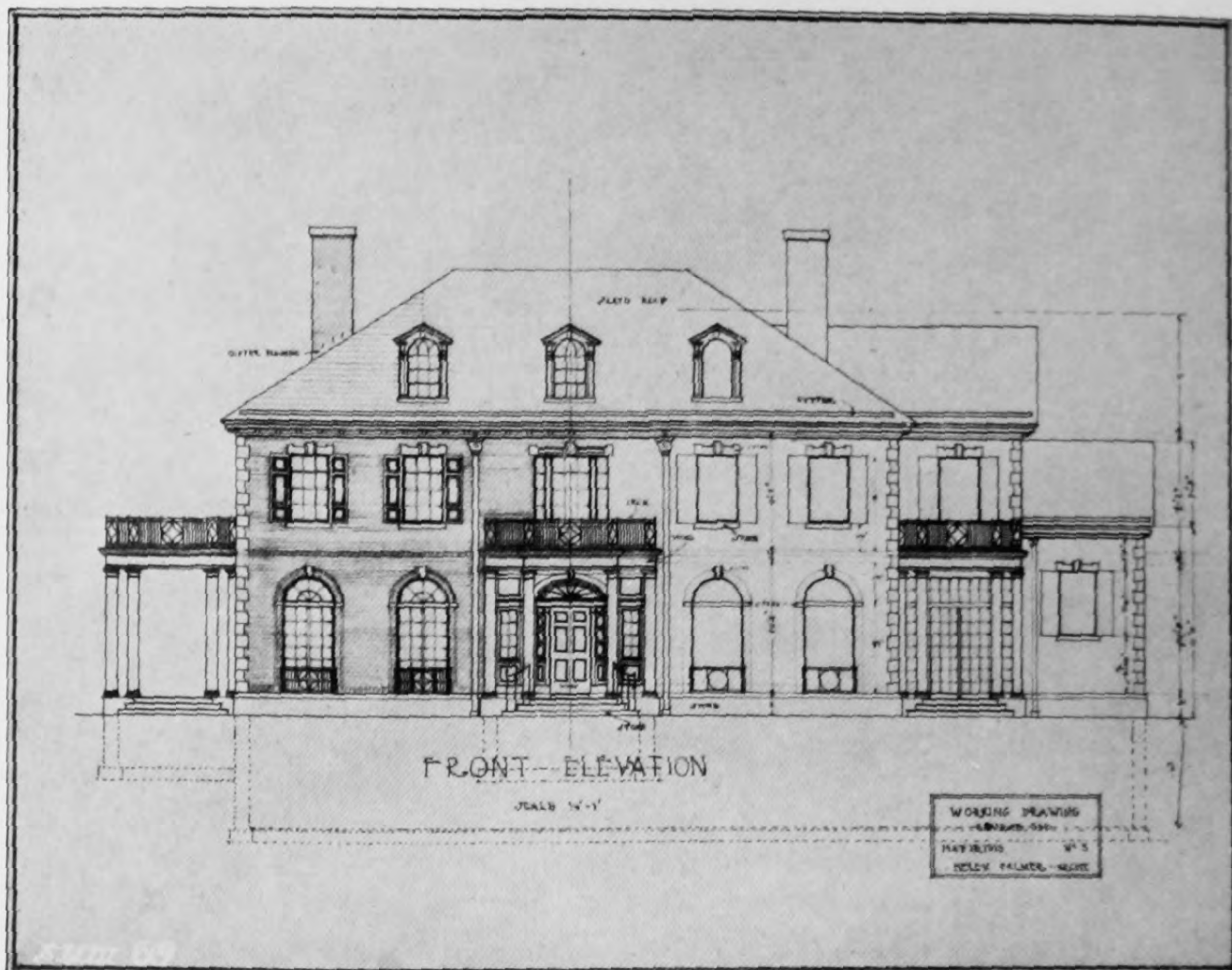


LONGITUDINAL SECTION

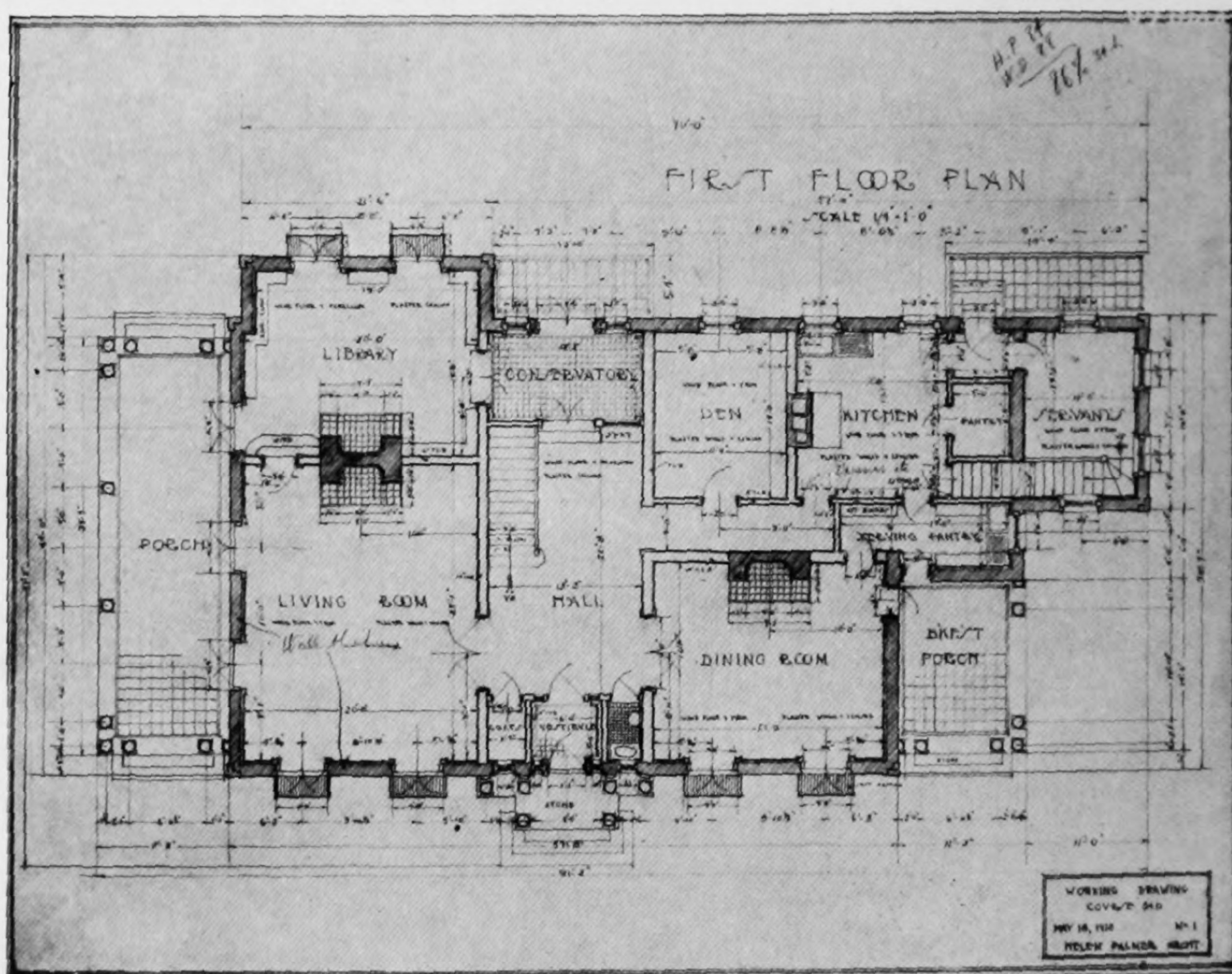


CROSS SECTION
JUNIOR DESIGN—A STAIR HALL

J. N. Bullen

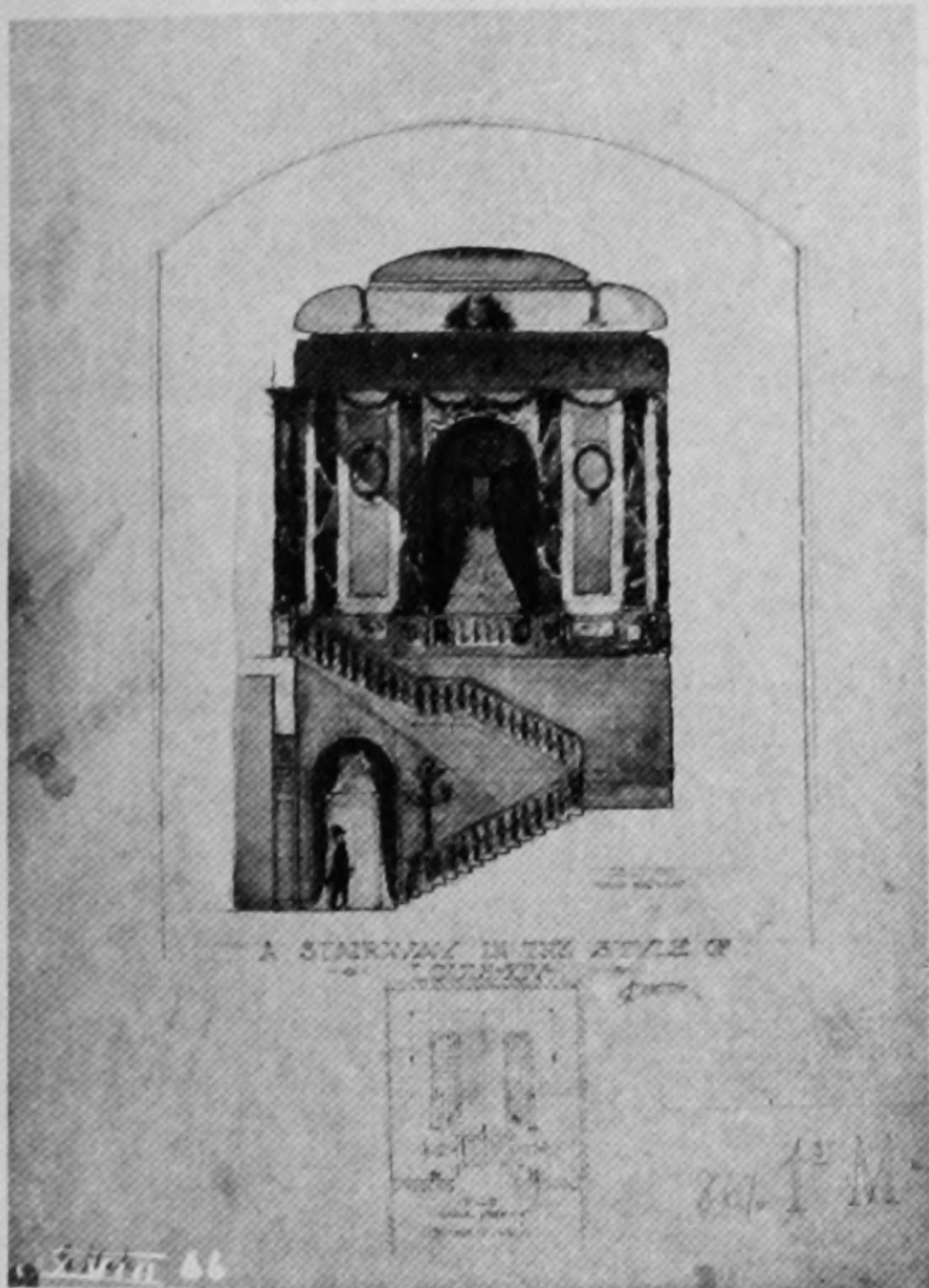
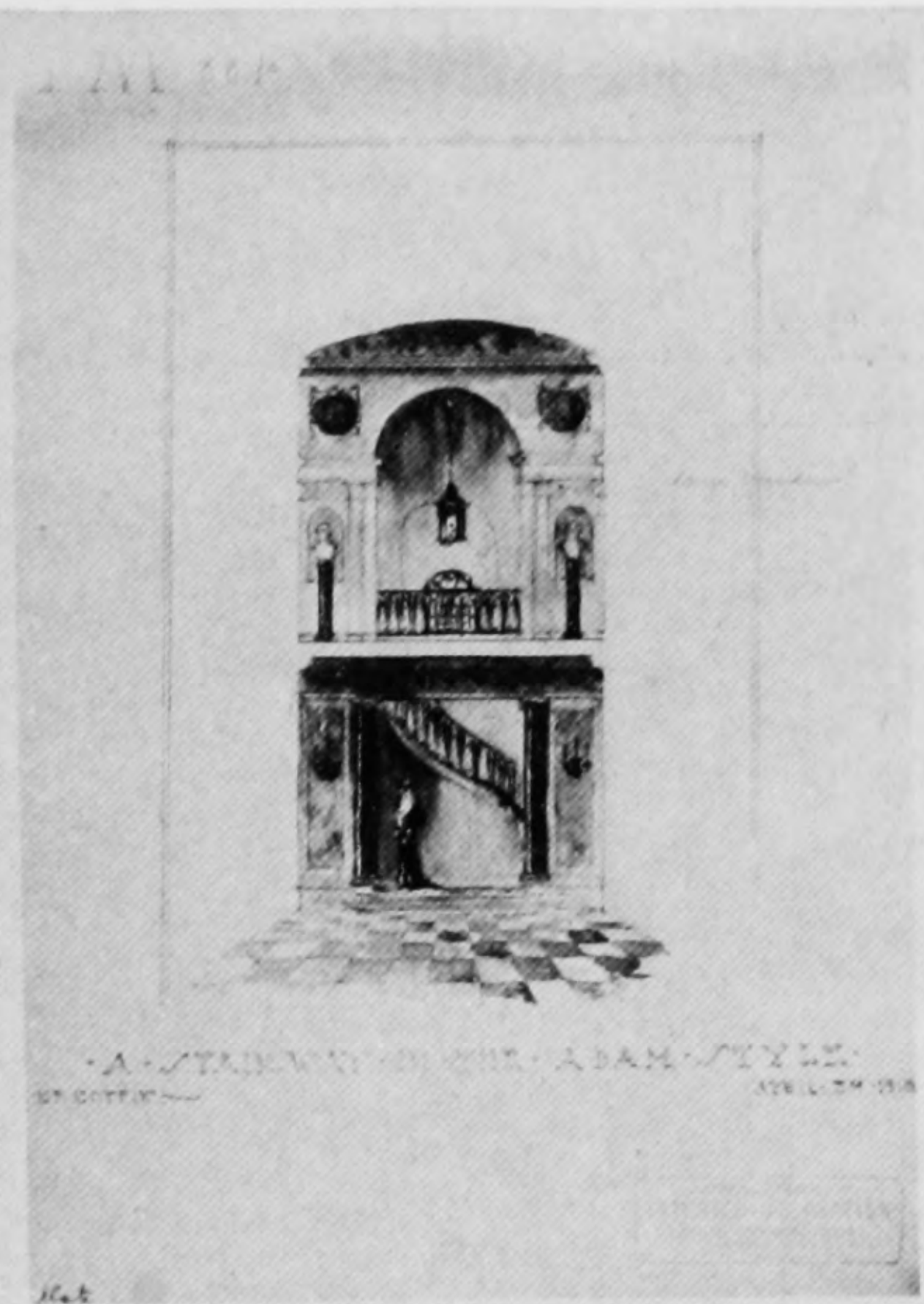
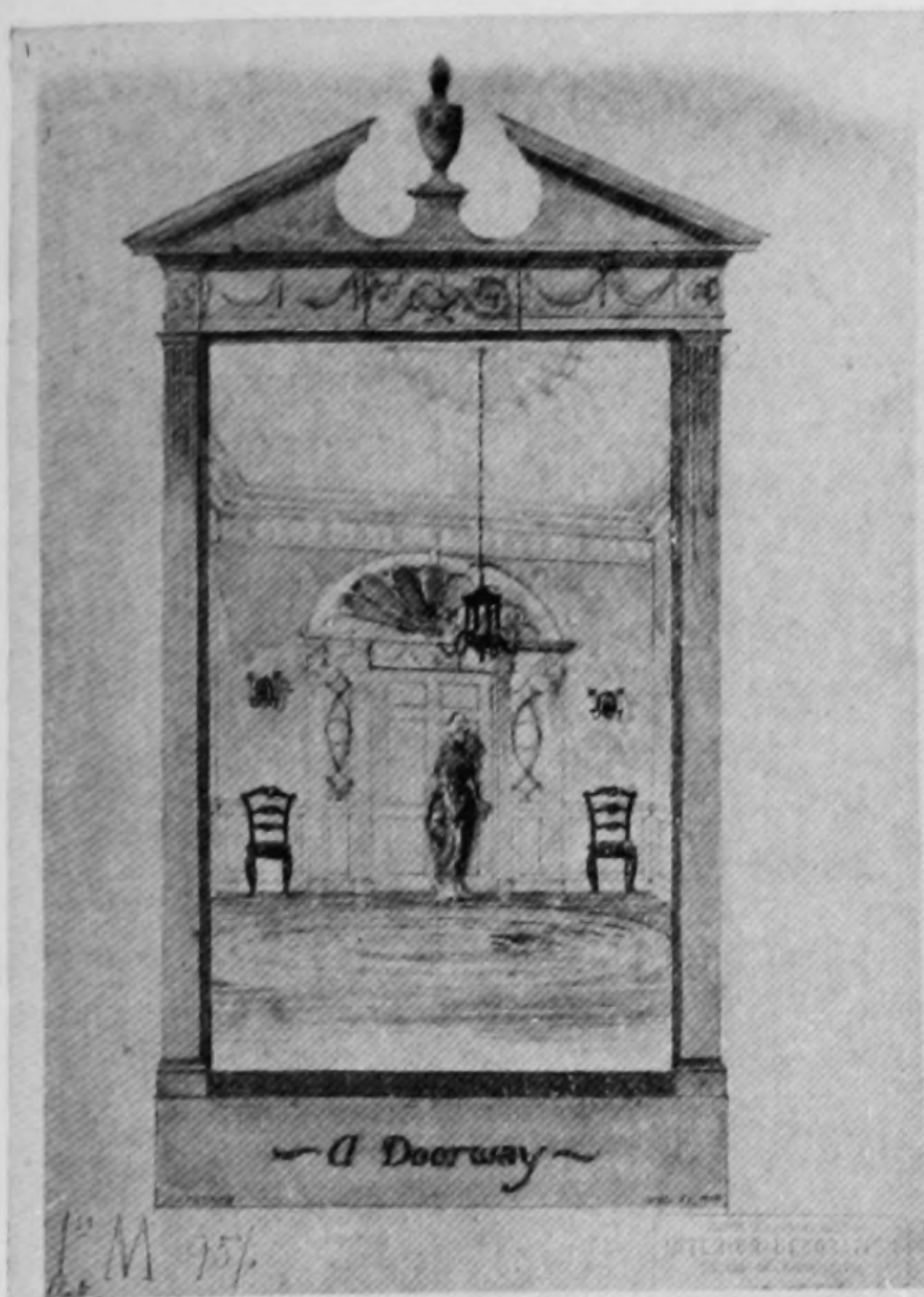


FRONT ELEVATION



FIRST FLOOR PLAN
HOUSE PLANNING AND WORKING DRAWINGS

Miss H. Palmer



W. G. French
C. L. Smith

K. F. Coffin
Miss R. Wolcott

INTERIOR DECORATION SKETCHES
JUNIOR AND SENIOR DESIGN



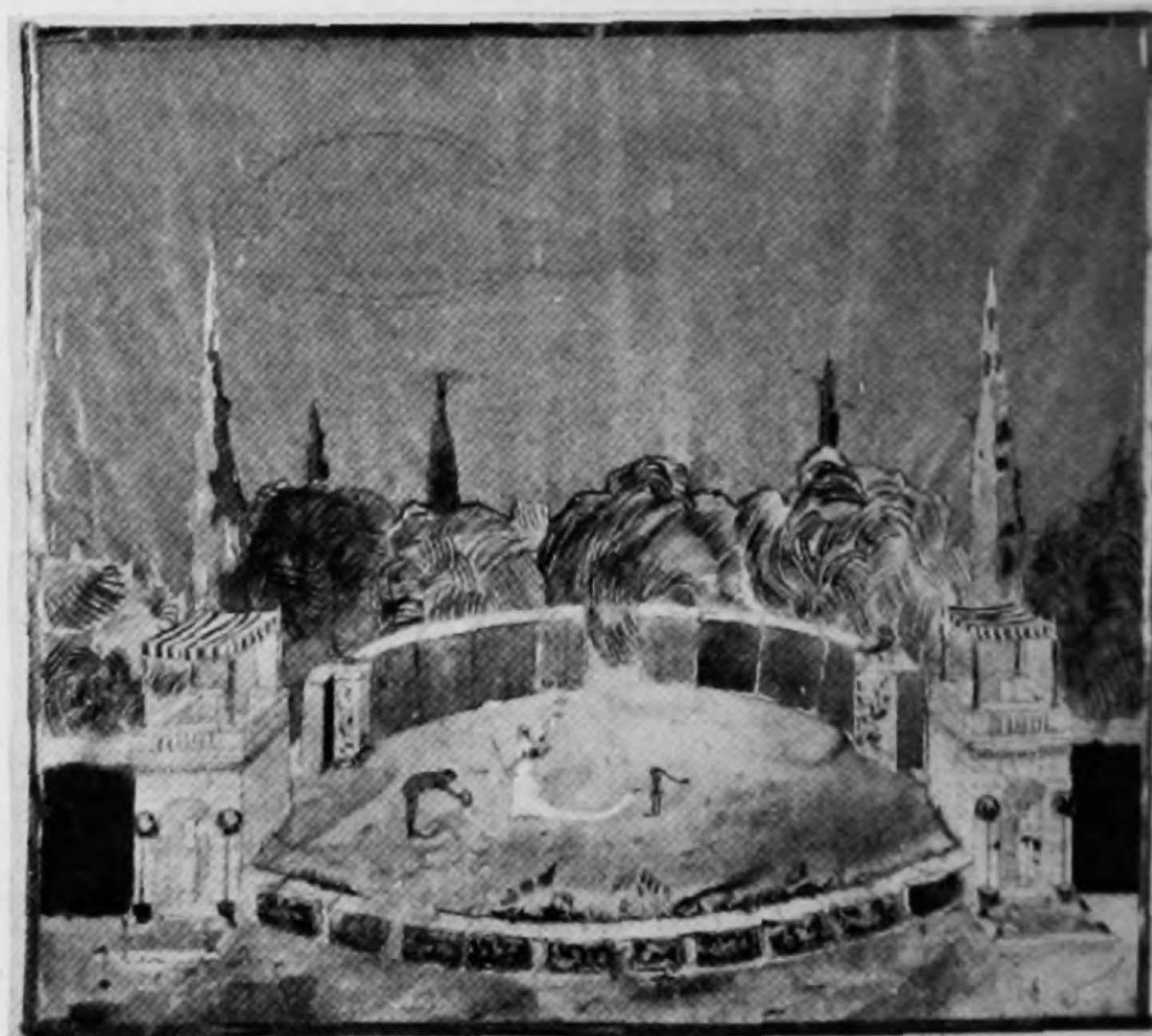
Y. C. Lu

ENTRANCE TO AN ELIZABETHAN HOUSE
(ARCHÆOLOGY PROBLEM)



W. G. French

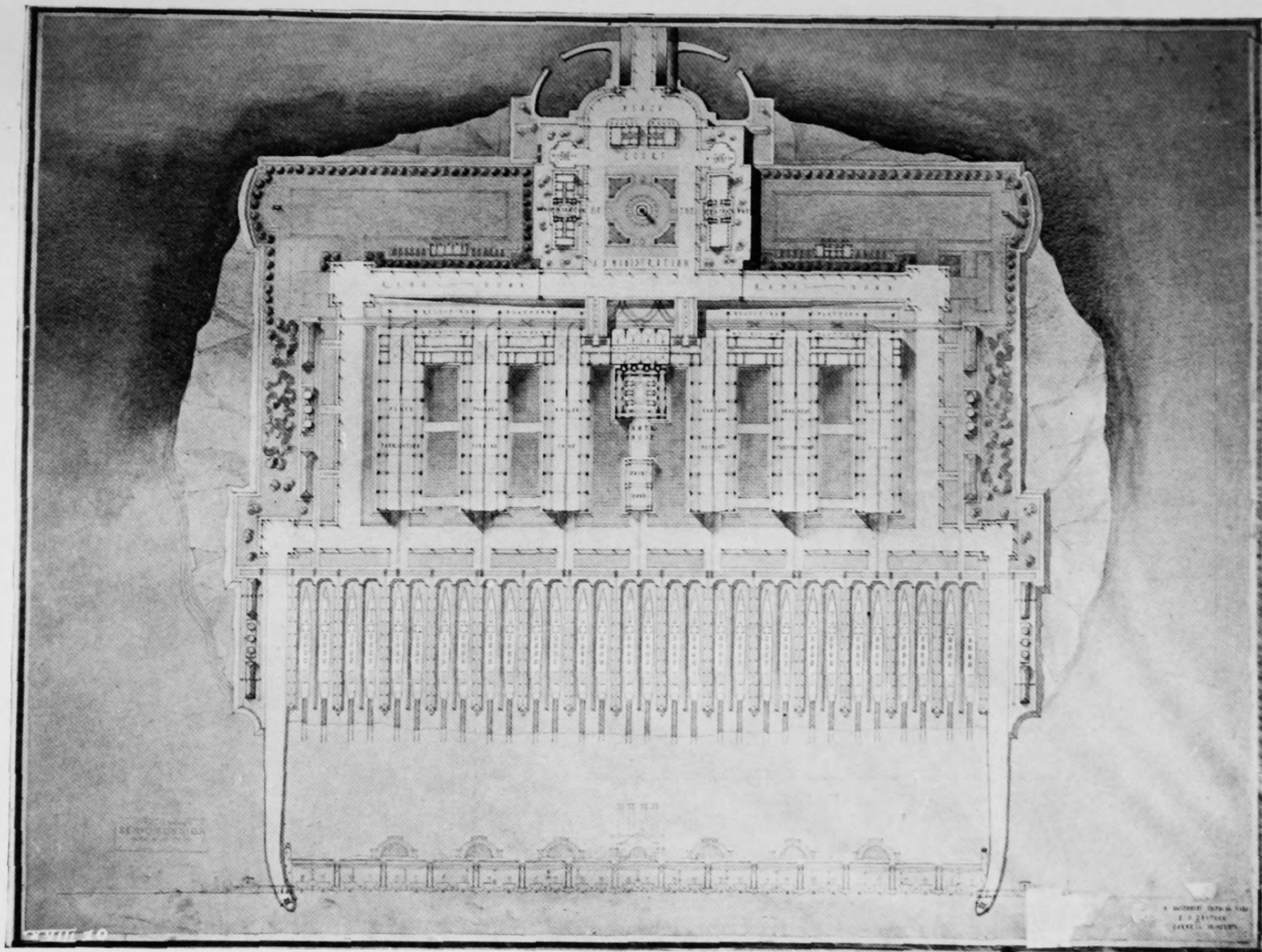
A BAPTISMAL FONT*



L. J. Kavana

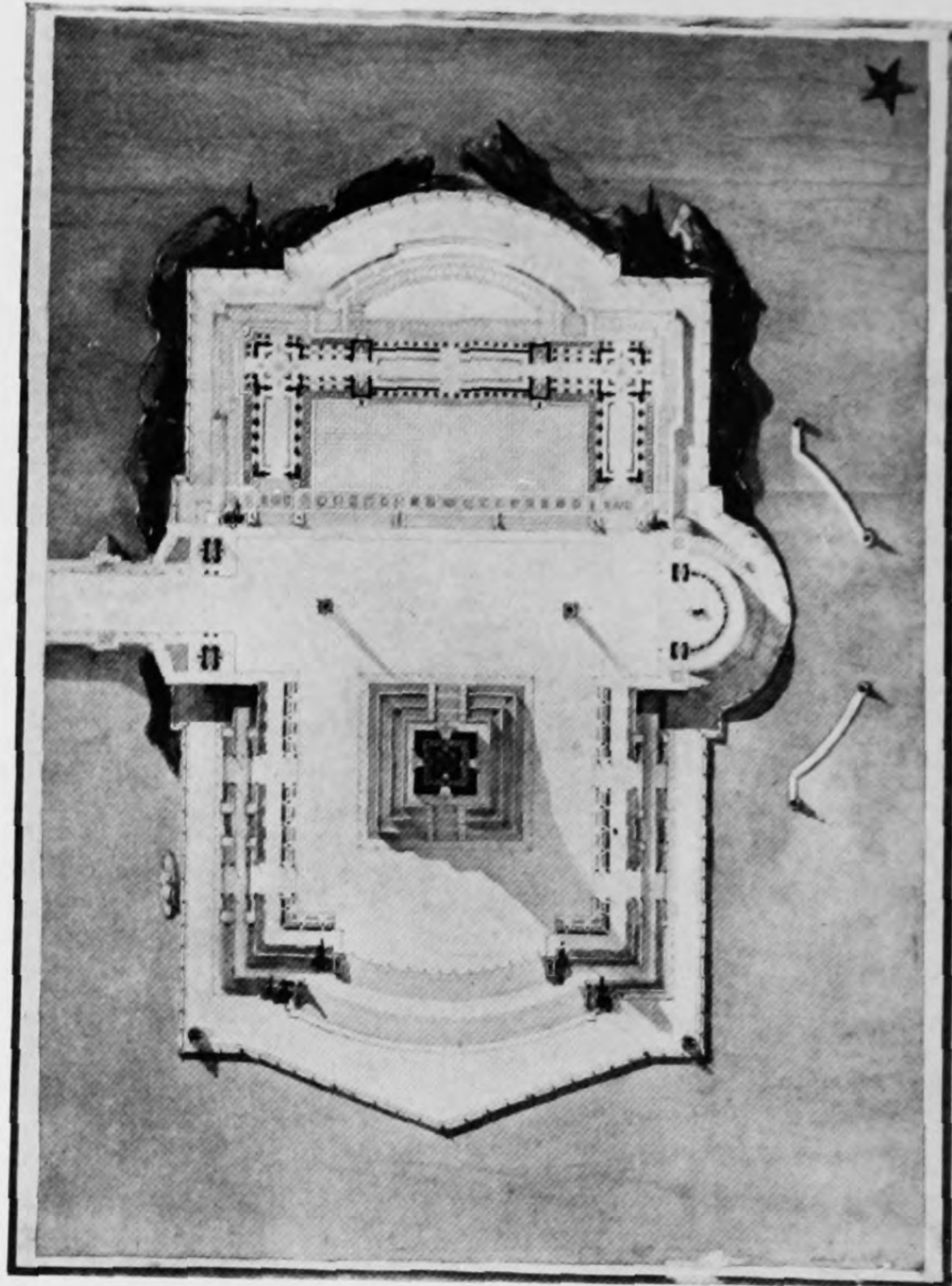
A GARDEN THEATRE

SENIOR DESIGN (ONE-DAY SKETCH PROBLEMS)



A GOVERNMENT SHIPBUILDING YARD

E. J. Truthan

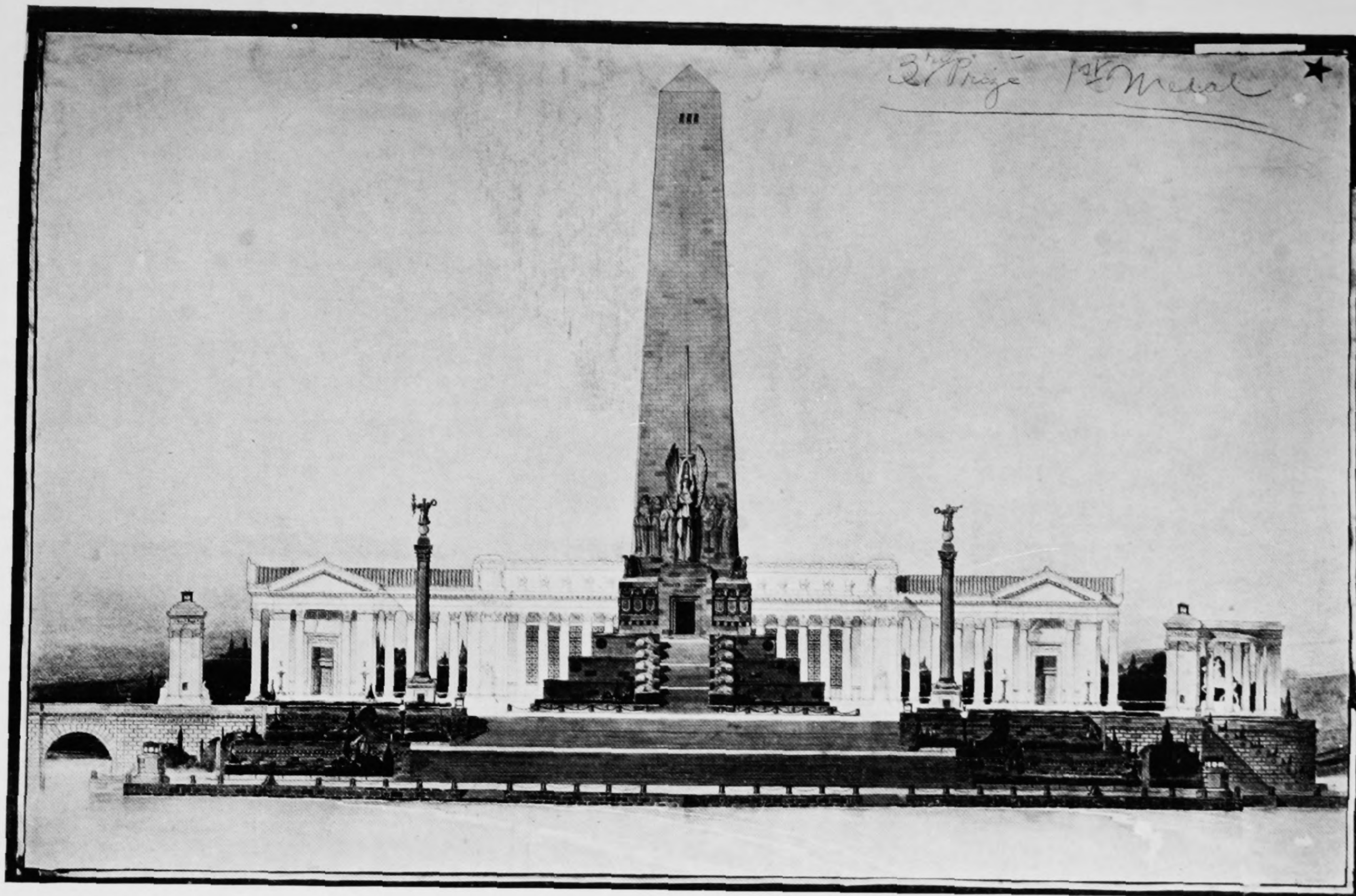


A. E. Middlehurst
AN ISLAND OF FREEDOM



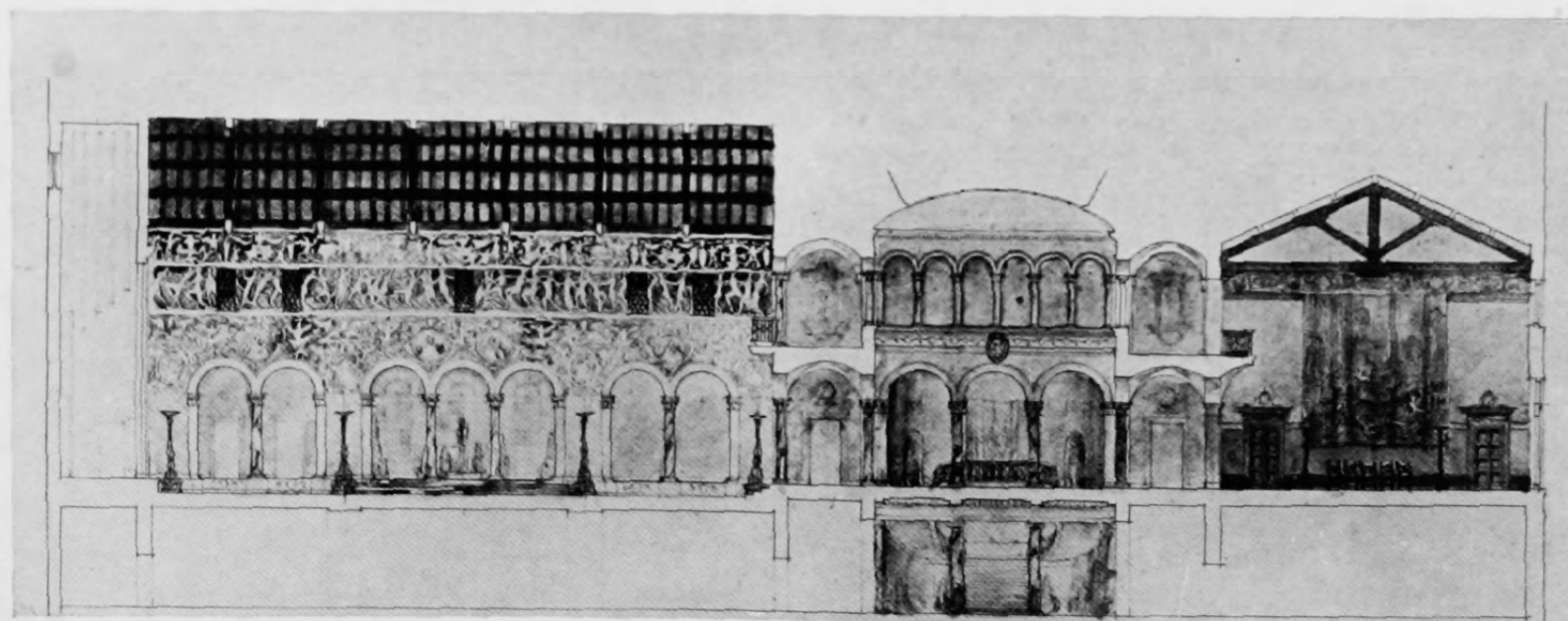
L. V. Lacy
A WORKMEN'S COMMUNITY* (TWO-DAY SKETCH PROBLEM)
SENIOR DESIGN

Awarded Warren Prize, \$50, S.B.-A.A., 1917

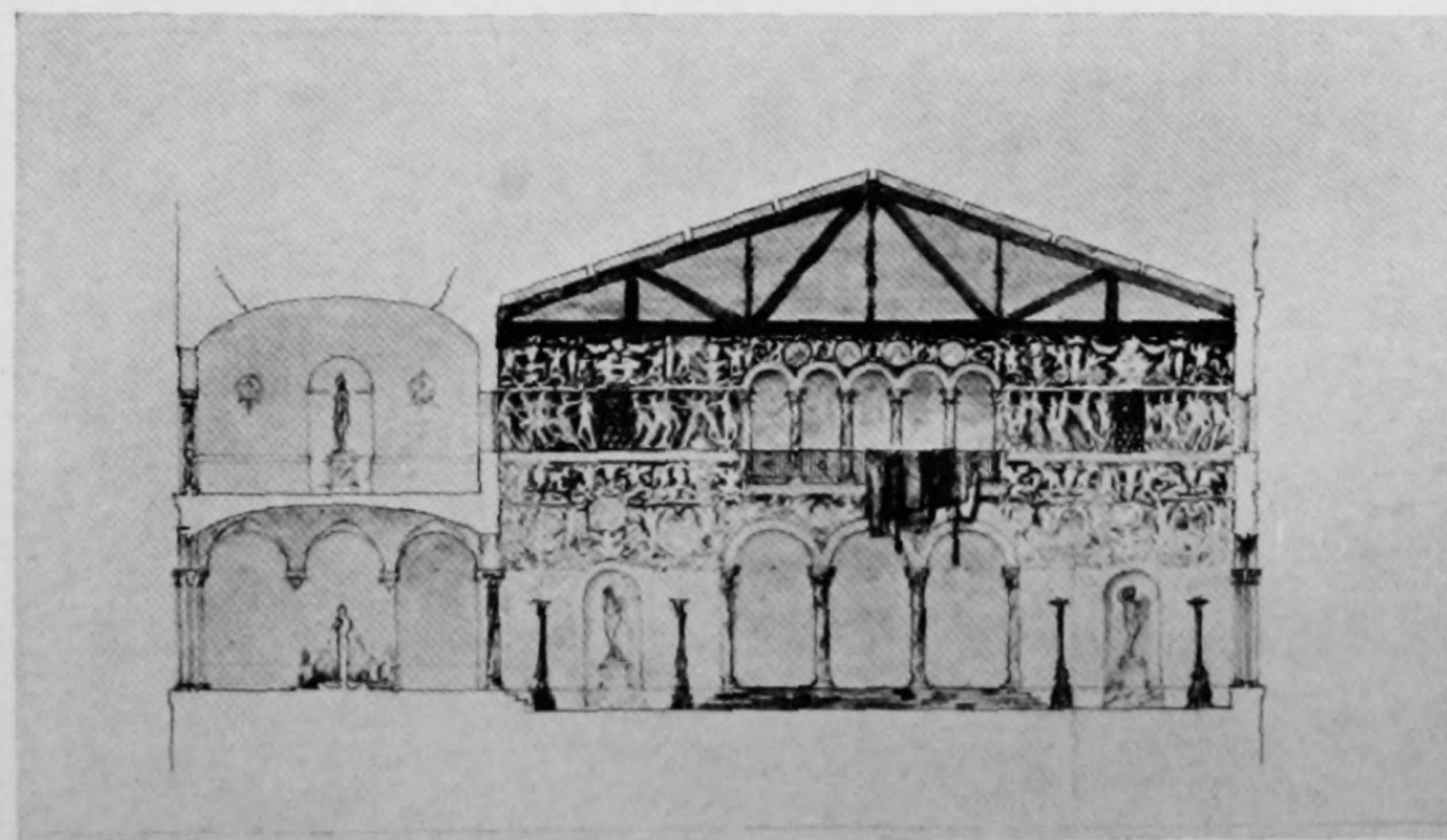


SENIOR DESIGN—AN ISLAND OF FREEDOM
(Awarded 3d Prize, Special Competition, S.B-A.A., 1919)

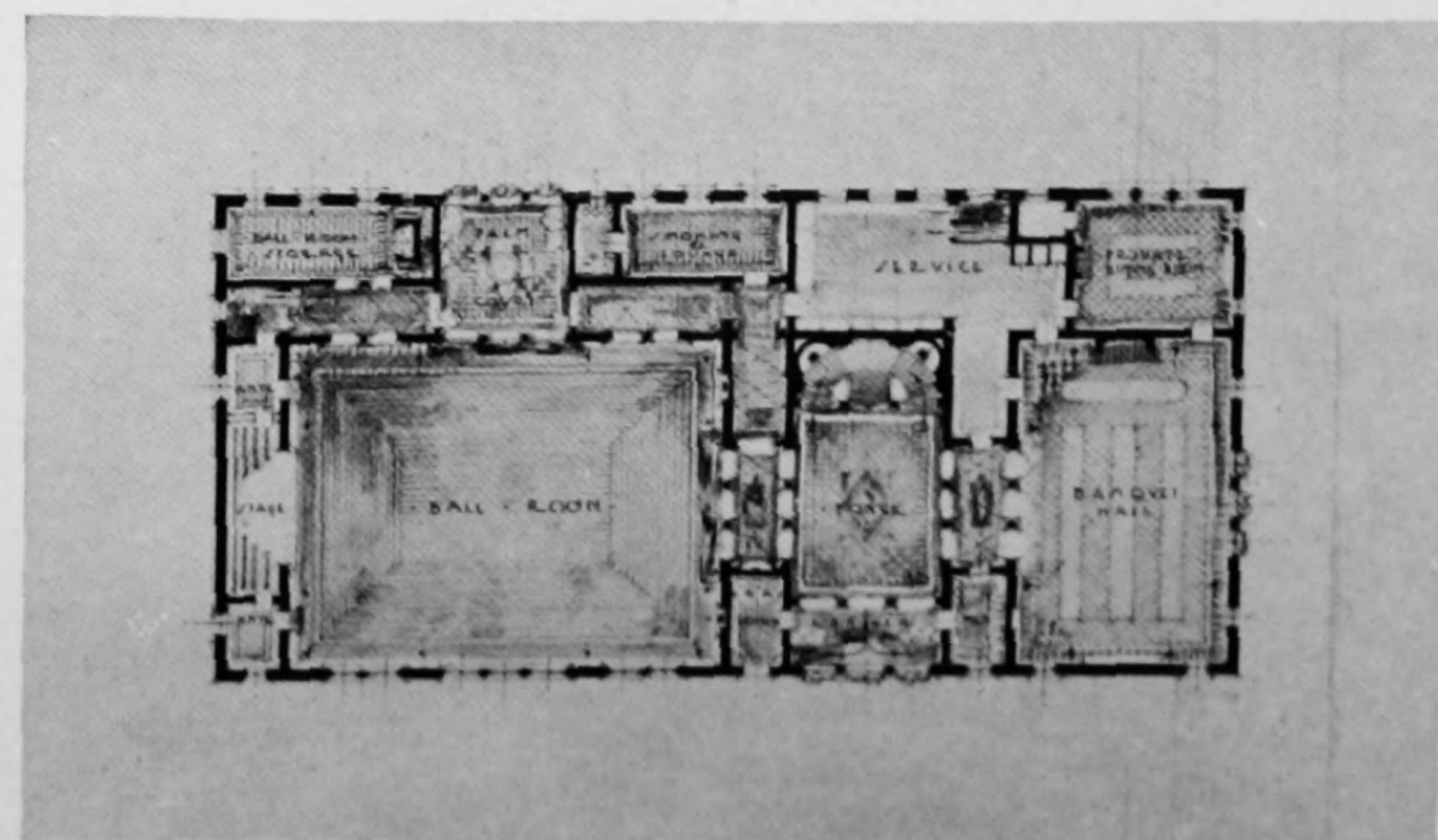
A. E. Middlehurst



LONGITUDINAL SECTION



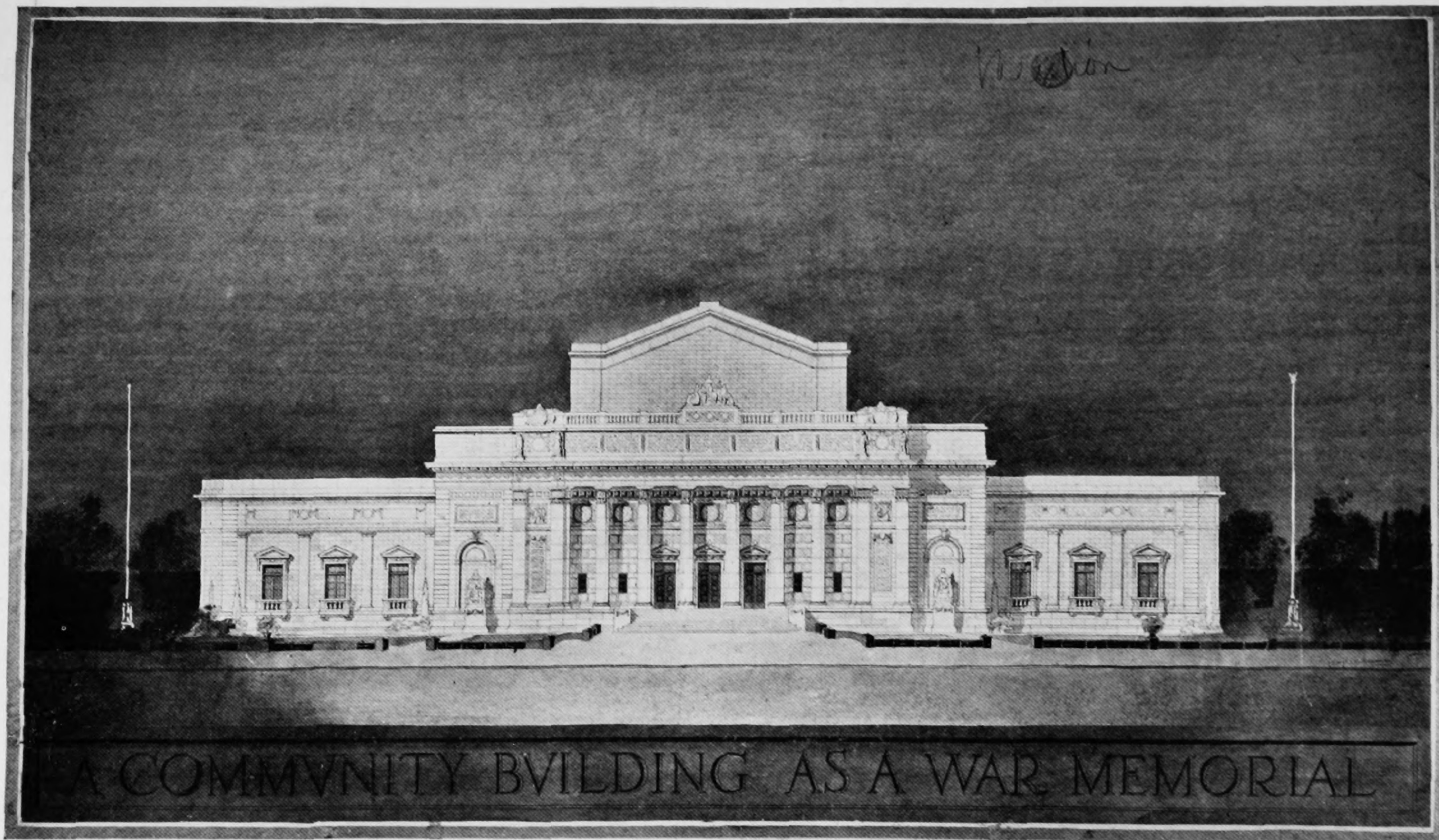
PLAN



TRANSVERSE SECTION

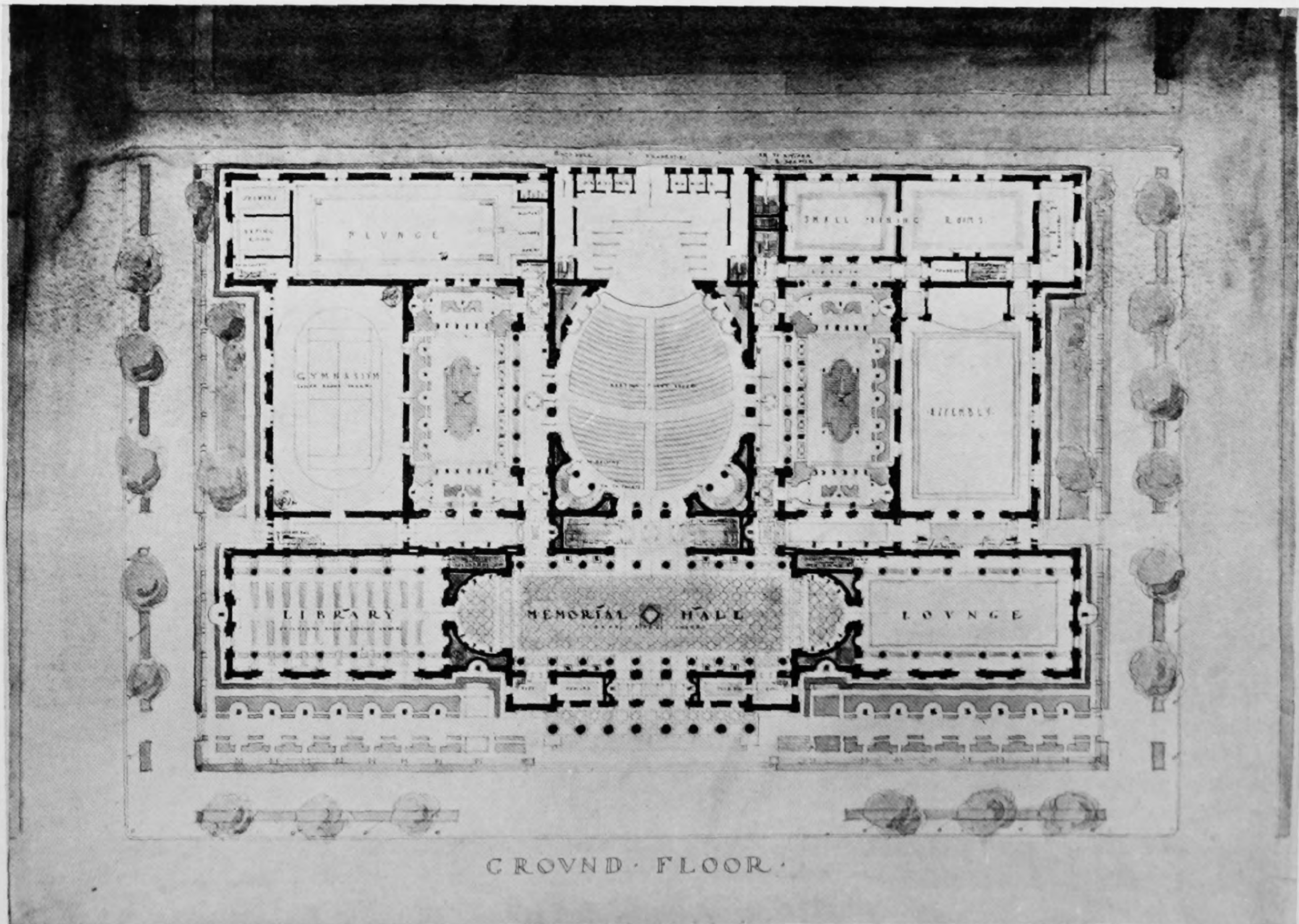
SENIOR DESIGN—ENTERTAINMENT ANNEX OF HOTEL

R. Bailey



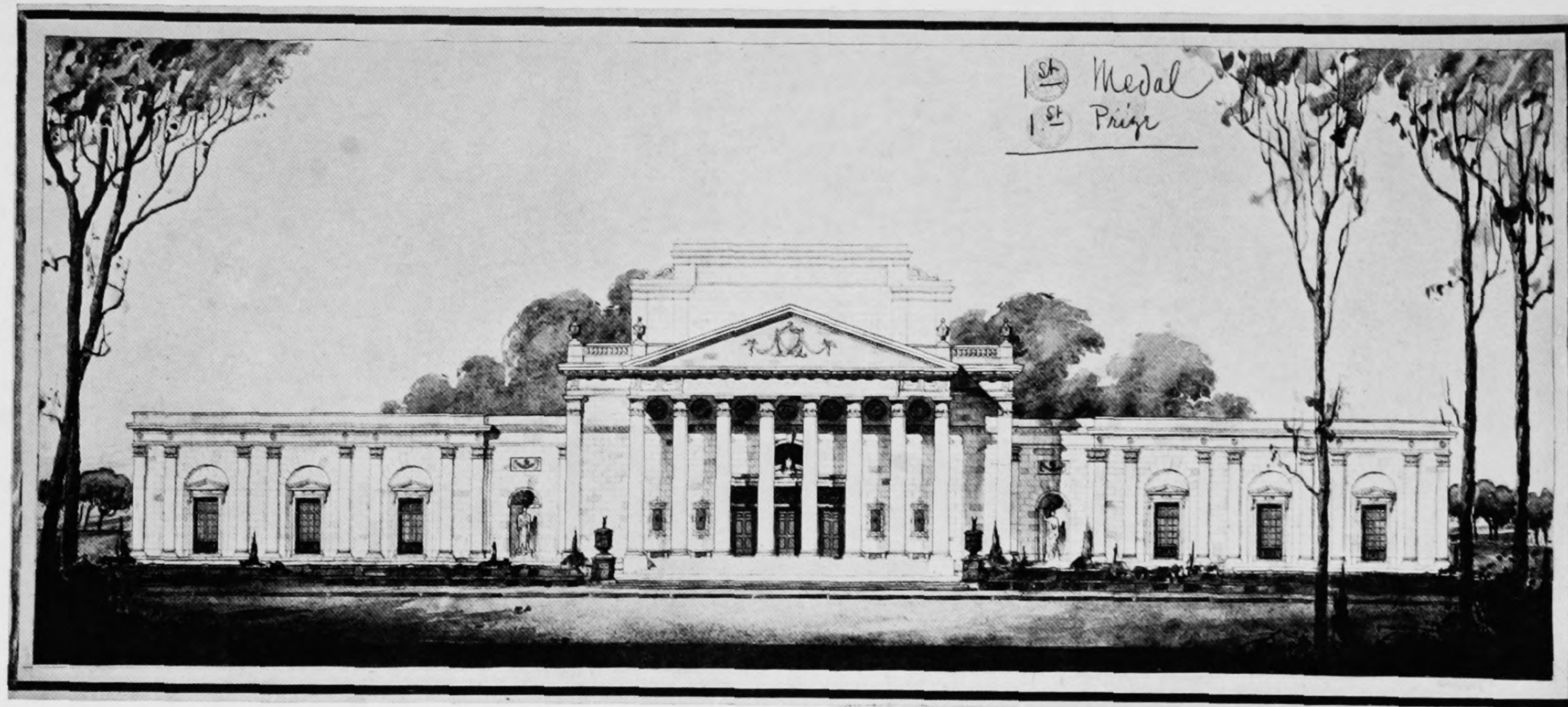
SENIOR DESIGN—A COMMUNITY BUILDING AS A WAR MEMORIAL

R. W. Cheesman



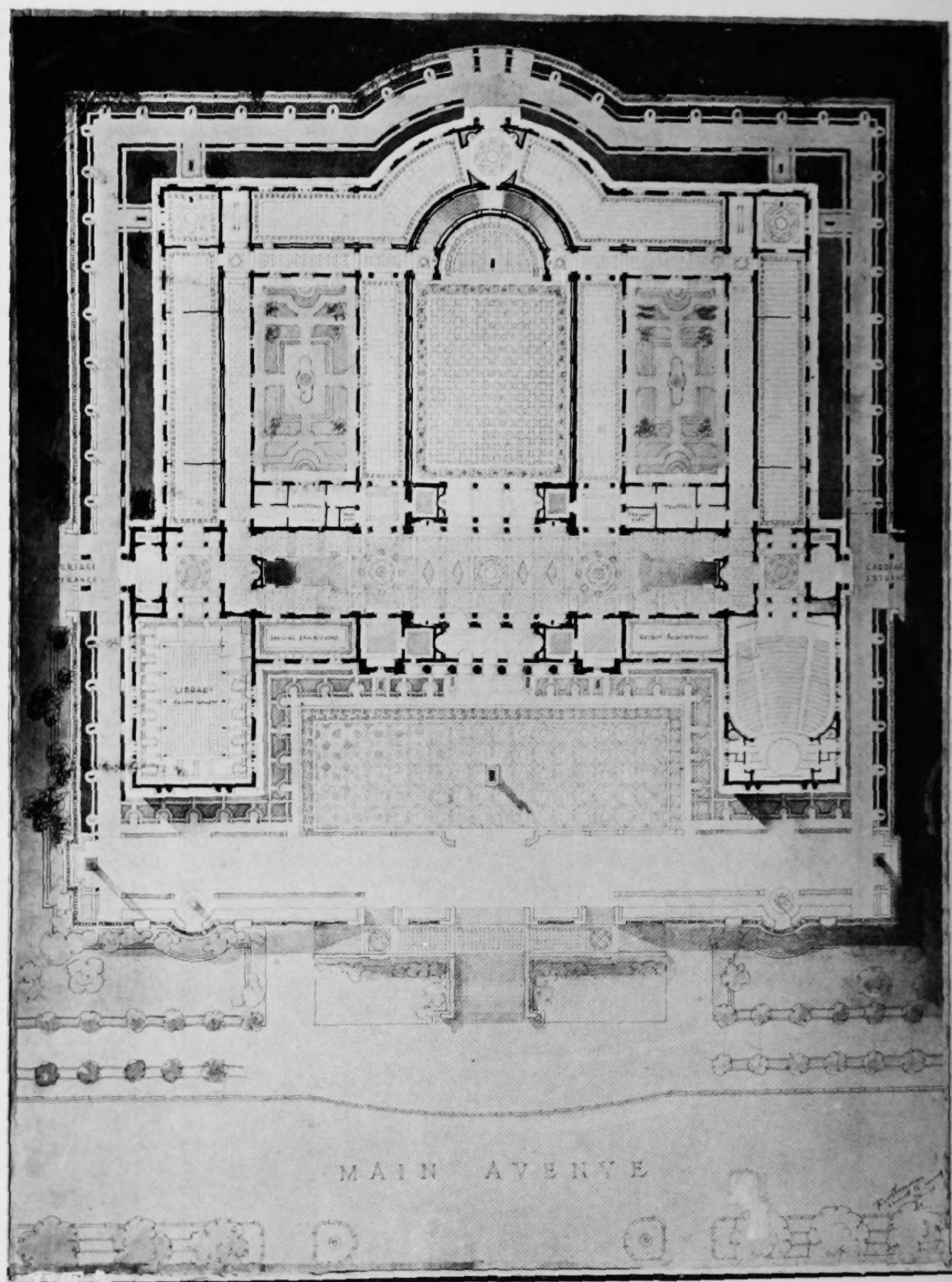
A. E. Middlehurst

SENIOR DESIGN—A COMMUNITY BUILDING AS A WAR MEMORIAL



SENIOR DESIGN—A COMMUNITY BUILDING AS A WAR MEMORIAL
(Awarded New York Municipal Art Society Prize, \$50, 1919)

A. E. Middlehurst



R. W. Cheesman

SENIOR DESIGN—AN ART MUSEUM

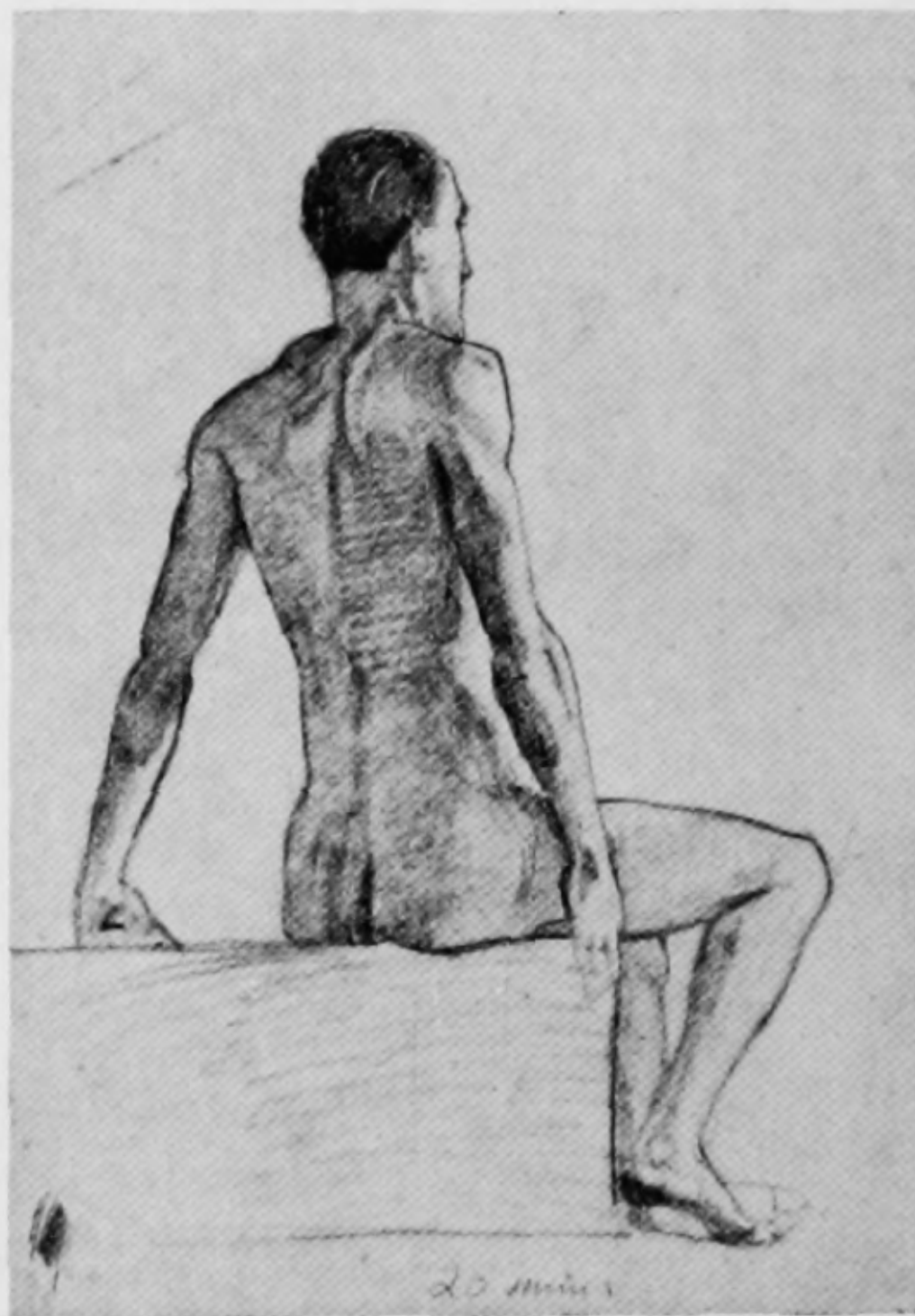


SENIOR DESIGN—AN ART MUSEUM
(Awarded 2d Prize, \$100, S.B-A.A., Special Competition, 1918)

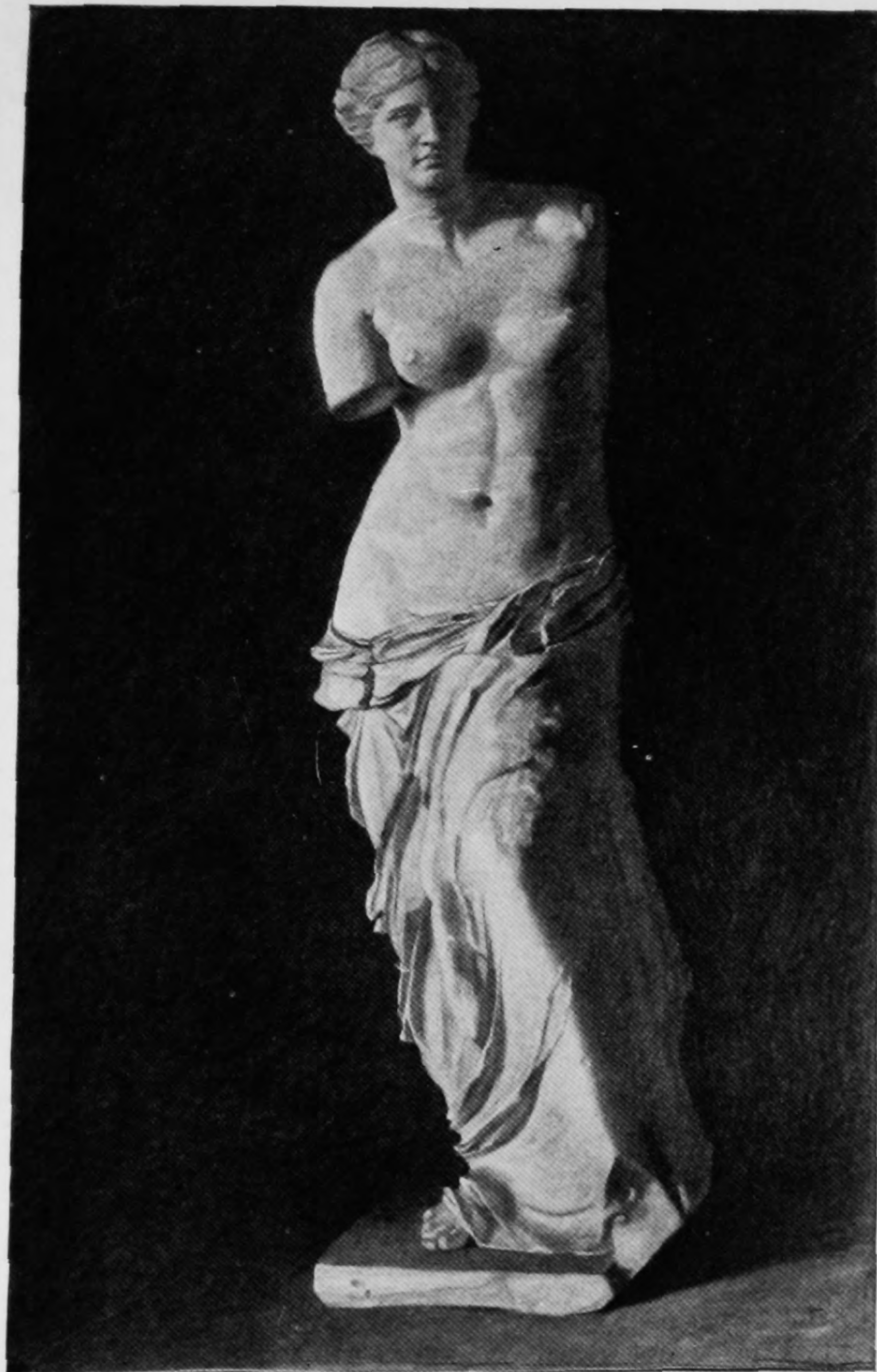
R. W. Cheesman



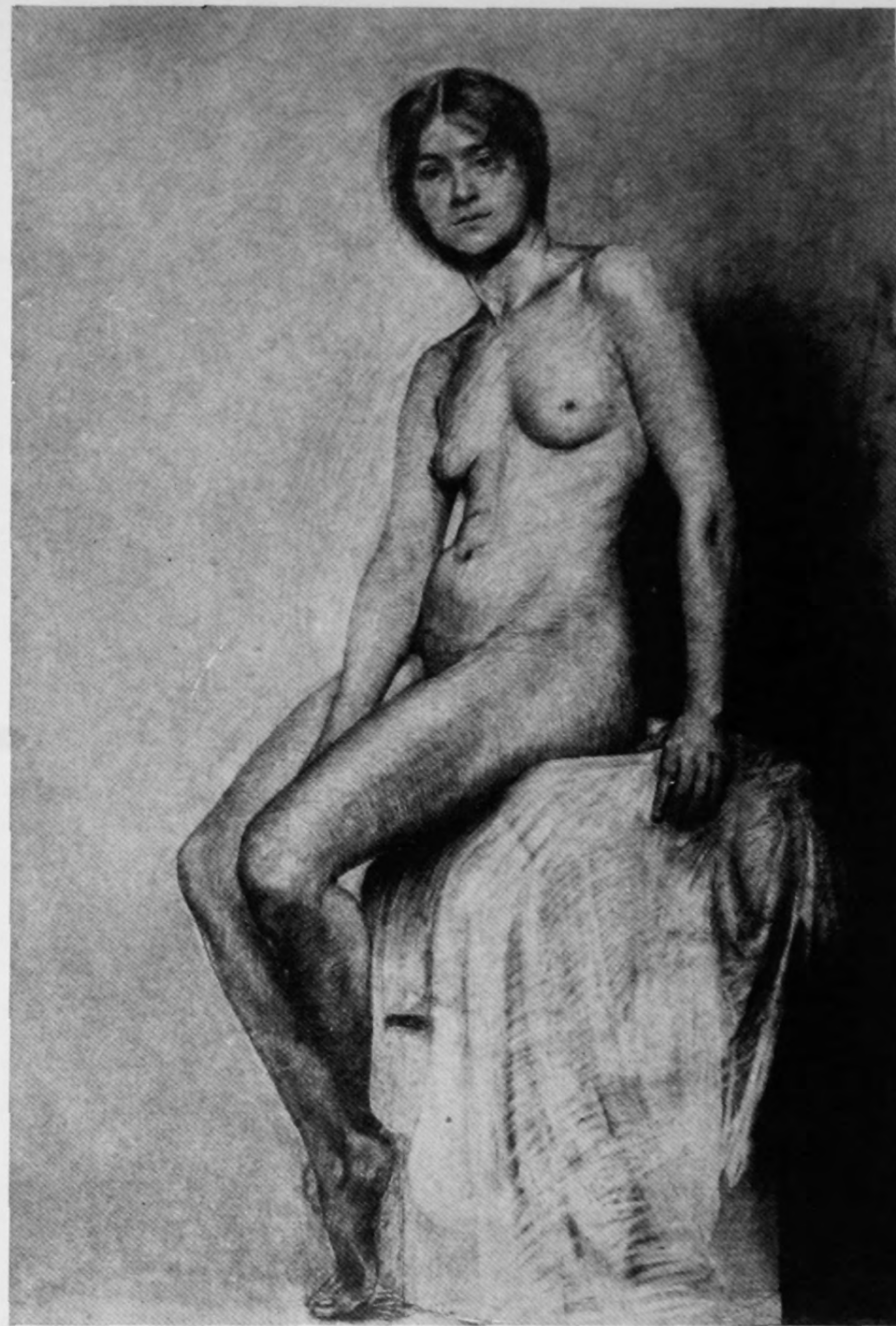
WATER COLOR DRAWING



SKETCHES FROM LIFE



DRAWING FROM THE ANTIQUE



DRAWING FROM LIFE

